

FORM

Prepared exclusively for students of
ART INSTRUCTION SCHOOLS

CONTRIBUTORS

Tore Asplund

Roswell Brown

Ralph Carlson

Ray Dowsett

Jerry Farnsworth

Charles Murphy

Walter Parke

George Terp

Charles M. Schulz

Walter J. Wilwerding

If there is one concept of art that is more important to an artist than all others, it must be the concept of form: that is, the shading and value rendering which make objects in a drawing appear to have shape and depth.

The biggest difference between the trained professional artist and the untrained amateur is that the work of one has the appearance of three-dimensional reality and the work of the other has the two-dimensional flatness of a paper cutout.

The training of the professional has taught him the importance of highlights and shadows to give his subjects form and a natural appearance. In this lesson, you will learn how to give a picture, drawn on a flat piece of paper, the depth and solidity of the subject itself.

Everything you see around you is made up of one or more of nature's four most basic forms. You will be introduced to these four forms in this lesson, and you will be shown the proper way of modeling and shading these basic forms to give them depth and a realistic appearance. Once you have mastered the rendering of highlight and shadow on these forms, you will see how easily the same principles apply to the treatment of any subject you might want to draw. And with this knowledge you will find that you have taken one more important step toward becoming a professional artist.



Still life painting done especially for Art Instruction Schools by Jerry Farnsworth.

Form

Too many amateur artists mistakenly pride themselves on "jumping into" their pictures without planning — without making preliminary sketches. Very few professionals attempt to draw without making "studies" or without using all the aids they can. You remember how professional artists use tracing paper to help complete drawings? Well, there are many other aids that will also help. For instance, the ruler comes in handy, the compass is often useful, and the need for preliminary sketches is always necessary.

When you first glance at the successful oil painting on this page, you might not realize all the work and planning that went into this piece of art. The artist did not start painting without making experimental drawings, nor did he find that each brush stroke was perfect the first time. We have reproduced one of the artist's early sketches to show you how he began his painting. At first he didn't use color, texture or very many details. He worked mainly to develop the solid structures by using guide lines and geometric shapes. With simple geometric forms, the artist's sketch looks like his subject matter with a minimum of details and effort. By ignoring the surface textures, color and unimportant details he was able to concentrate on the solid structure or FORM of the objects in his picture.



You can tell that an orange is an orange and not a pear by color and texture, but you first recognize objects by their forms (solid shapes or structures). If you were blindfolded, you could still distinguish the orange — simply because its form is so different from the pear's. The pear has as much form as the orange, but the two objects have different "shapes".

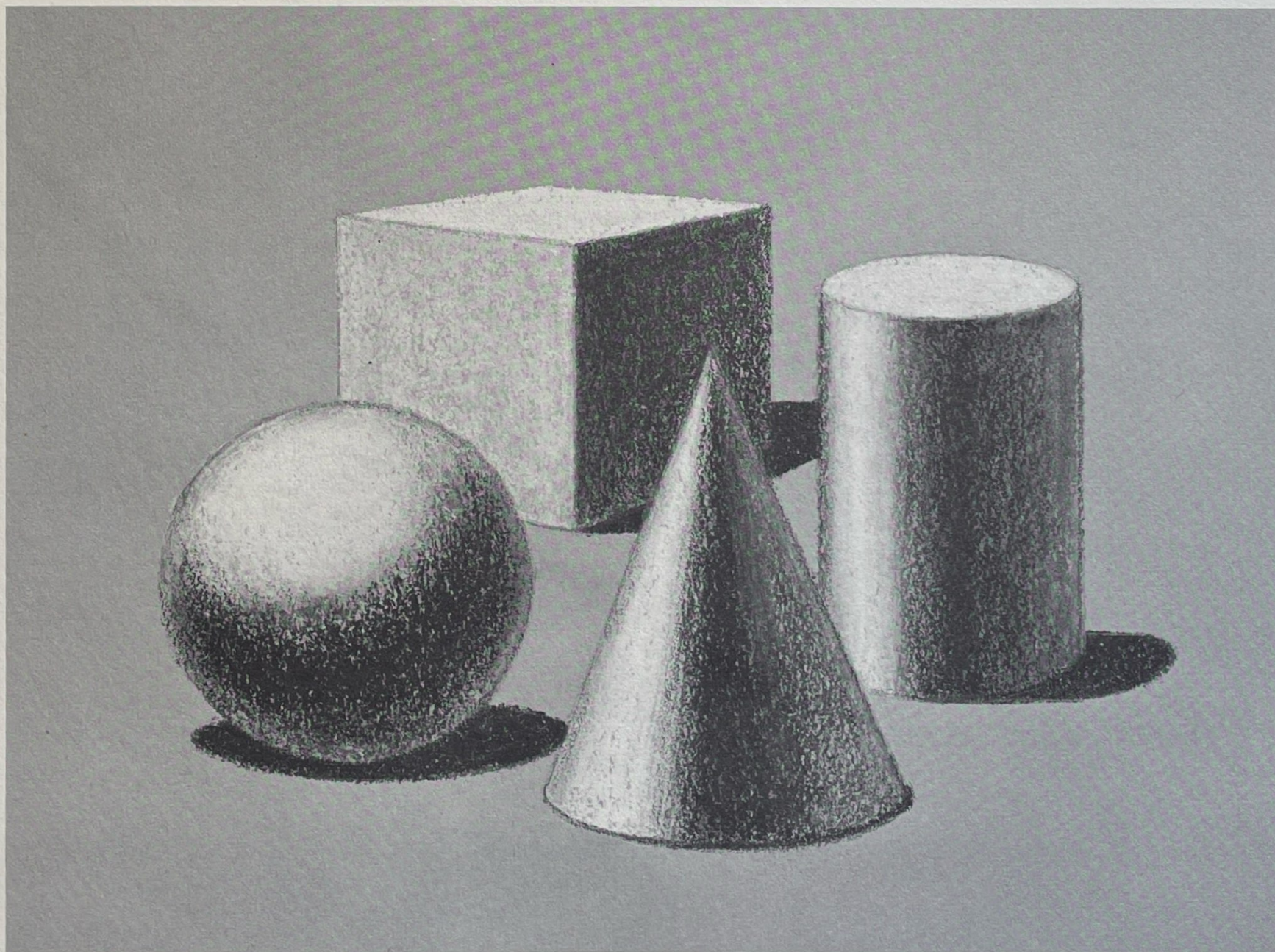
Form refers to the "3-dimensional shape" of an object. In other words, form takes up space — it is solid. The pear and the orange take up more space than a grape, but all three are "solid". They all occupy space — they all have height, width and depth. Actually, all objects have form. And if you look for the forms of objects (solid shapes) and not for just the texture or color, you will be able to draw realistically sooner. Your subjects will appear solid and you will not be tempted to draw them flat, or 2-dimensional (with only height and width). If you see only 2-dimensions in your subjects, your pictures will always have a flat, outline quality. But once you have a real understanding of solid objects, you will be able to shade and render them to appear "real".

In some ways, creating realistic images is easier for the sculptor than for the painter. Because the sculptor works with solid material, he always has depth as well as height and width. For instance, he could take a lump of soft clay and make very few alterations to create an image of the orange we spoke of earlier. But your drawing paper does not have depth. You can not "model" an orange or even a grape on it because it is 2-dimensional — it is flat. As a pictorial artist you will be trying to create the illusion or appearance of depth. You will never have "real" depth unless

you "build-up" your picture by adding paper or thick clay-like paint. But if you do this, you will be doing sculptural work, and not painting . . . for painting is always "flat".

You will, however, be able to create the impression of depth in many ways (by shading with lines, planes and color). But in order to apply these drawing methods, you will have to "feel" your objects as well as see them. You will have to know they are all solid . . . that they all have depth. In other words, the orange we discussed earlier is not just a circle painted orange; it is solid and ball-shaped and should be rendered to reveal this.

But how do you know the form of your objects? At first it will be helpful to actually "feel" them. But soon you will be able to see resemblances between different objects and then you will be able to draw their forms by looking. Do you remember the orange and the grape? If you were to examine each one separately and then compare them, you would notice they have similar forms. They are both spheres (ball-shapes). Just as we have classed the orange and the grape as spheres, artists throughout the ages have found it helpful to remember that all objects are composed of four basic forms: the sphere, the cube, the cylinder, and the cone. For instance, as we have discussed, the grape and the orange are both spheres. The roof of a silo and a funnel are both cone-shaped. A lump of sugar and a house are shaped somewhat like cubes. And a log and a pencil are modified cylinders. If you find the BASIC forms of your subject (sphere, cube, cylinder, cone) you will find drawing easier. You will be more able to give the impression of realism and solidity to your work.

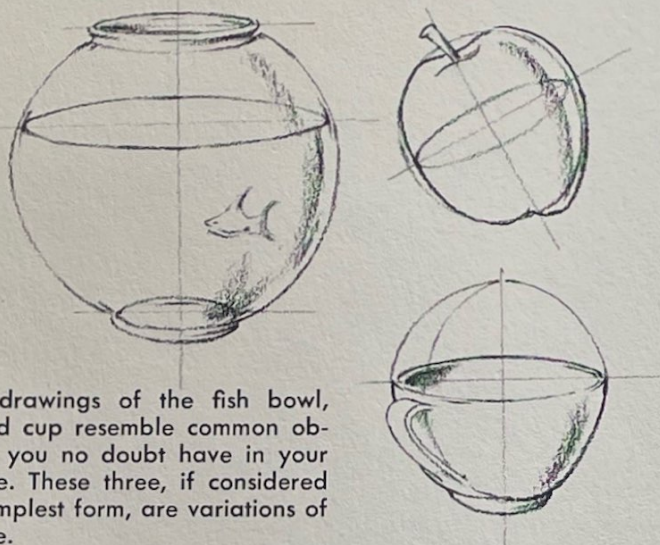


By George Terp.

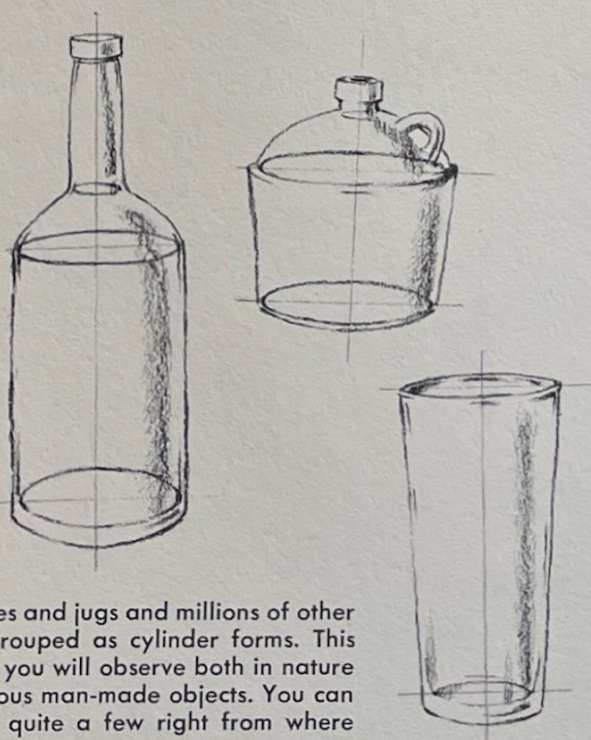
Form In Common Objects

Everything you see and touch is made up of one or more of the four basic forms. Some objects, because they are very simple, resemble "basic forms" almost perfectly. Fluorescent light tubes and cigarettes are good examples. Each of these is long and round; they are simple cylinder forms. Your wastepaper basket may also be round like a cylinder. On the other hand, if it has flat sides, it may look more like the squarish form of the cube. Even if your basket is not a perfect cube (each surface is a perfect square), you should still think of it as a member of the cube family.

You don't often find the four basic forms as exact cubes, cylinders, cones or spheres, but must allow for variations. And this can be a challenging exercise . . . searching out the basic forms in common objects. Try it! Pick objects at random in your study area and list them on one side of a sheet of paper: chair, table lamp, etc. Now, across from these, try to reduce each object to its simplest form. Tell whether it is a cube, sphere, cone or cylinder. Some of these objects may have two or more basic shapes or



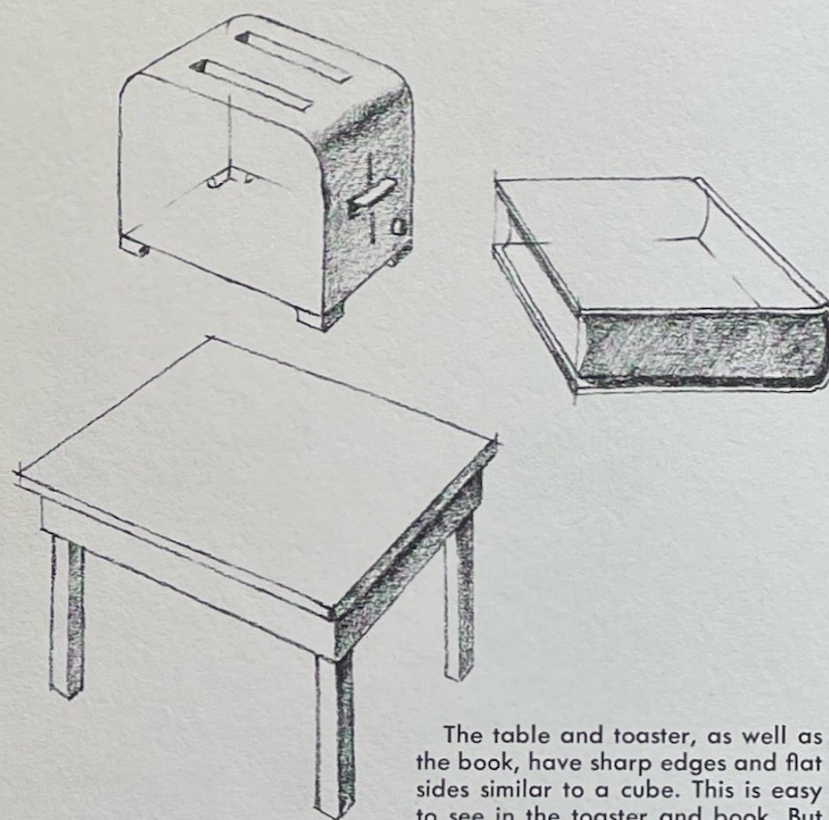
These drawings of the fish bowl, apple and cup resemble common objects that you no doubt have in your own home. These three, if considered in their simplest form, are variations of the sphere.



Glass bottles and jugs and millions of other objects are grouped as cylinder forms. This is a form that you will observe both in nature and in numerous man-made objects. You can probably see quite a few right from where you're sitting.

forms combined. For example, the base of a desk lamp may be basically a cube, while the shade may be a cylinder. Watch for these combinations when you make your list.

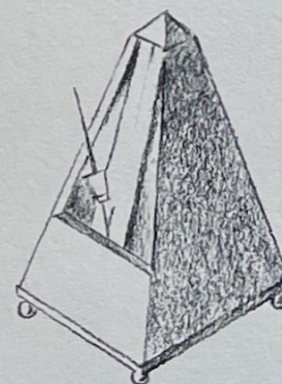
How did you do? If you are like the average student, you probably named five or six items and thought that was enough for a start. And it is. It's a great start because those objects and those basic forms are filed in your mind forever! Your mind is like a gigantic filing cabinet that can hold as much information as you can put in it. It's true. It has been proved that you never forget anything! When you can't remember the date of a battle for a history test, or the name of your uncle's best friend, it's because you have misplaced the key to the file. The information is still there. You just aren't able to get it out at the moment. As an artist, this is a very important principle to know and use. The more pictures you can see with your "camera-eyes" and remember in your "file-mind," the more creative and productive you'll be. To keep your file in order and to get the most use out of it, keep the system of remembering simple. With every object you see and draw, start by listing it as a cube, a sphere, a cone or a cylinder. Think of the four basic forms. Look for them in everything, everywhere!



The table and toaster, as well as the book, have sharp edges and flat sides similar to a cube. This is easy to see in the toaster and book. But with the table you have to use your artistic imagination. Think of the table as being solid, with no air space between the four legs and you will "see" a block shape, a cube.



On the next three objects, the cone form is clearly illustrated. The pine cone, in particular, takes its name from the basic form that it follows. The metronome, used for counting in music, and the funnel are also variations of the cone.

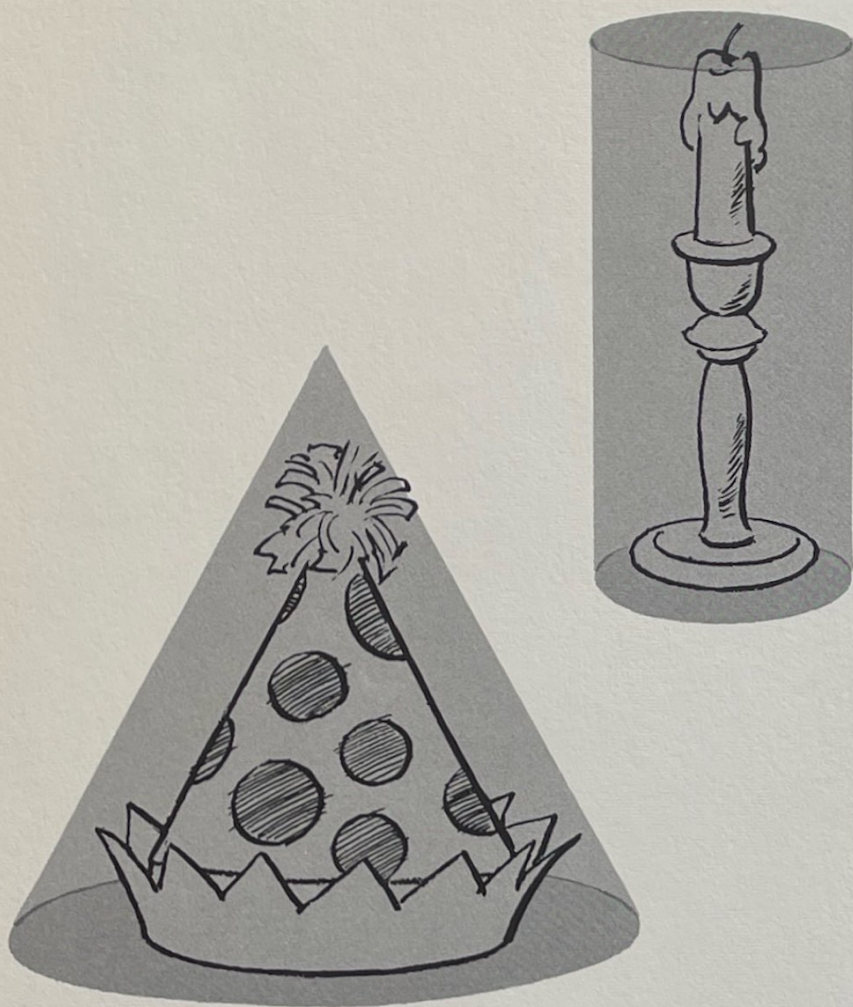


Forms In Space

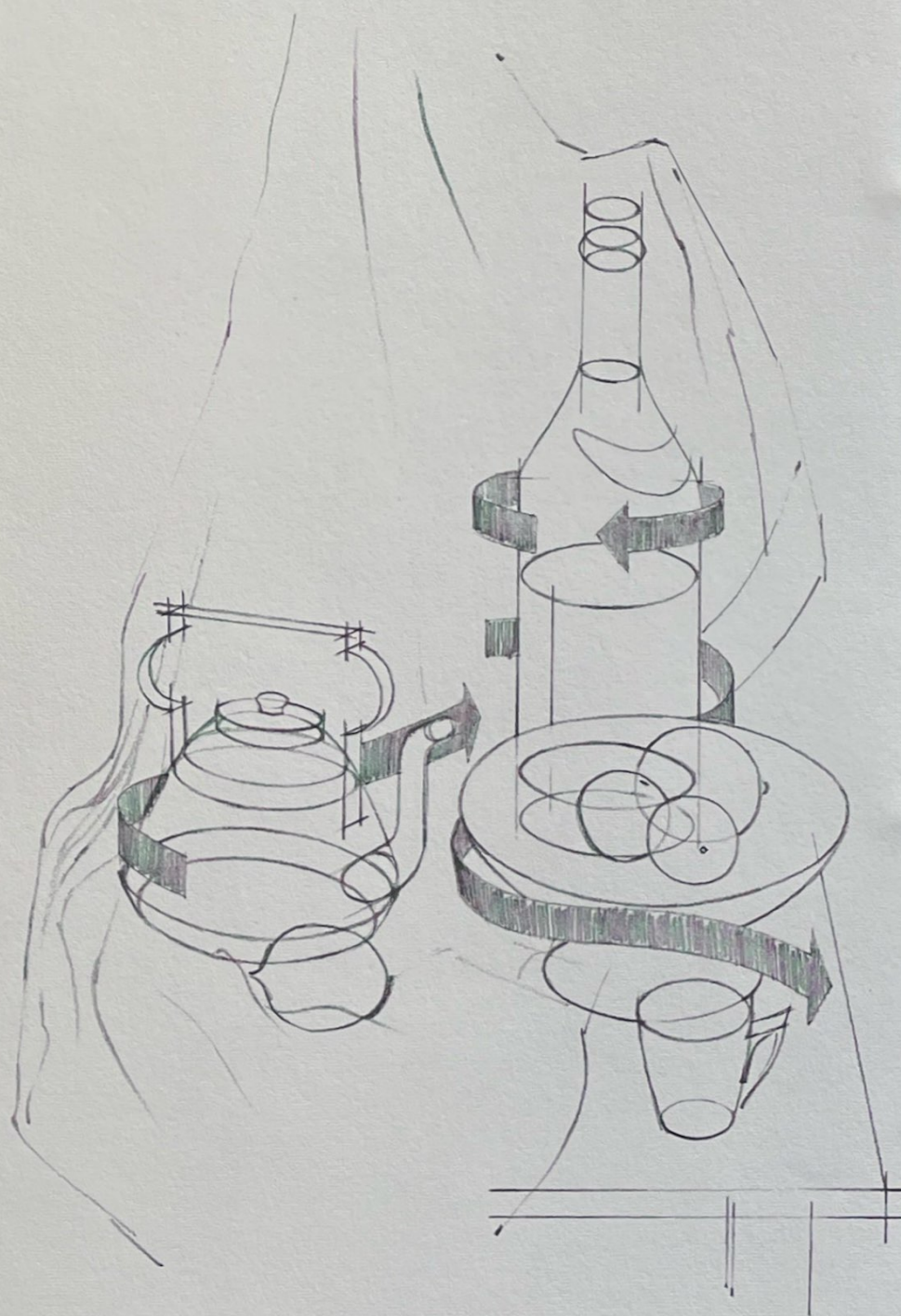
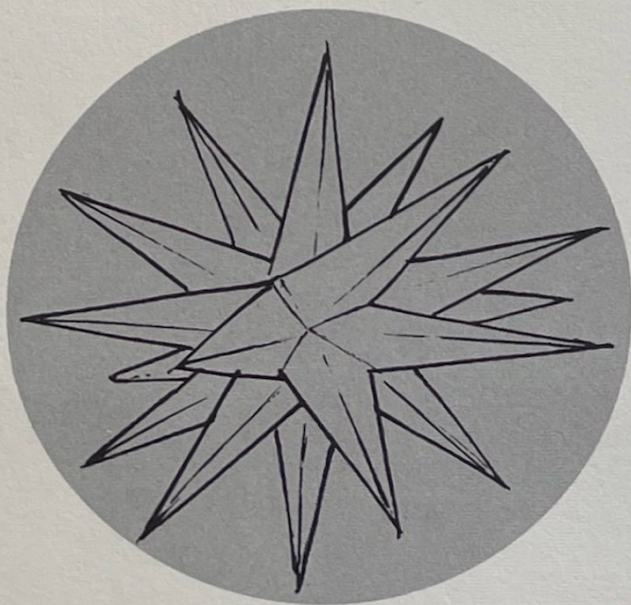
In making your drawings of objects more solid and realistic looking, it is often helpful to fit each object into an "imaginary package". Ask yourself which of the four basic forms you would use as a container if you were to wrap the objects for mailing. A candle stick holder is usually round so you would pack it in a hollow, cylindrical tube. A clown hat or party hat could be mailed if it were inserted into a cone. Most Christmas tree ornaments would be protected in a "sphere" package. And, if you were to send a car or bus by mail, the package might be made in the shape of a big cube or rectangular box. To do this kind of packing, you may sometimes have to mentally simplify a part of the object to make it fit. Eliminating the handle on a jug would let it slide easily into a cylinder. At other times, however, you may want to mentally add to the object to make it a solid, and more compact. Adding

material to the space between the legs of a table makes it a better cube package.

Now, what happens to the forms and the space around the forms, if you put many objects into your "make believe" package? Remember that each form has bulk and must have room to sit without cutting into its neighbor's space. And, when you place a cube beside a sphere, the two objects don't fit closely together! No matter how carefully you arrange these items, you will always have empty air space between them. This is also true when using more than one object in a picture. As soon as you start drawing group arrangements you have to show the negative space around the objects as well as the positive shape of the object. Note the arrows on the still life, indicating the negative space in this picture. In your own work, you will be drawing positive form, but you don't want to forget that a good picture needs "air to breathe," too.



Spot illustrations by Ralph Carlson.



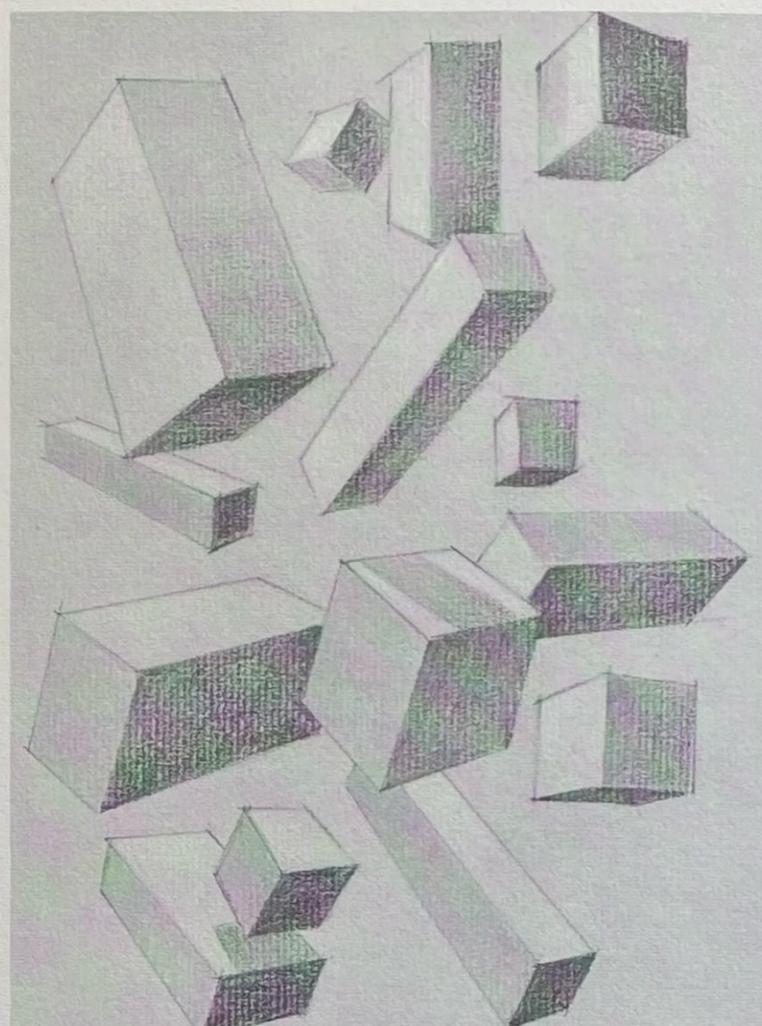
In this still life, arrows illustrate the flow of air (negative space) around the objects. You don't need arrows in your work but you should have negative space when arranging several objects in the same picture.

Distortions in Form

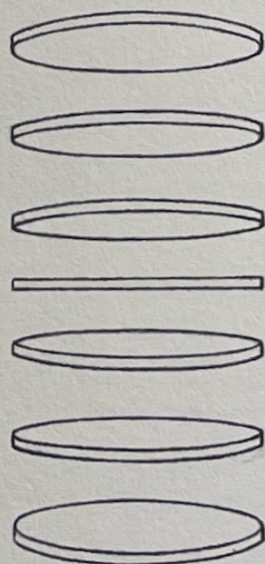
When you begin drawing more than one form at a time, and as you draw objects from different positions, you will realize that they seem to change shape. The end of a cylinder will not always look round, but at times, becomes an imperfect circle or an ellipse. Cubes do not always appear perfectly square either, but look larger in front and smaller in the back. These changes are referred to as *foreshortening*. The study of foreshortening is called perspective and you will be using it in many of your later lessons. For now, you need only a few simple rules to guide you in your drawings of form.

The most important perspective rule you should remember is that an object looks smaller as it moves away from you into the distance. You see an example of this when you look down a stretch of railroad tracks and the ties and rails look smaller and smaller until they almost vanish. Similarly, if you stand near a row of telephone poles and look down the row, the poles in the background near the horizon will look shorter than the ones close to where you're standing.

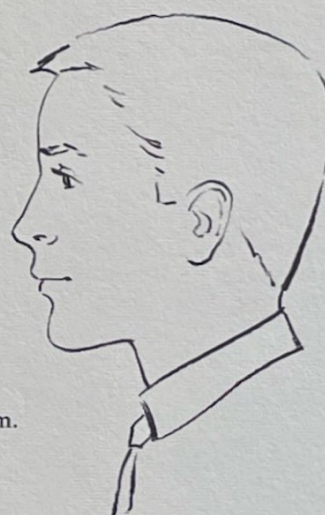
On this charcoal sketch you can clearly see foreshortening in the different sized blocks. Note that the front part of each block looks larger than the end farther away. It is this change in size, this distortion, that gives the blocks their feeling of form and reality. Foreshortening must be shown if a drawing is to appear correct. Our sketch shows the blocks floating in space but the same foreshortening would exist if they were placed on the ground or on a table, or were glued to a wall. Try this experiment to prove the point — set a group of children's building blocks on the floor at different distances from where you are sitting. If you observe closely, or better yet, if you make a good drawing, you'll detect distortion in every block. If you don't have any building blocks, use cardboard boxes or wooden boxes.



Art work by Ray Dowsett.



Demonstration by Chuck Gravem.



Foreshortening

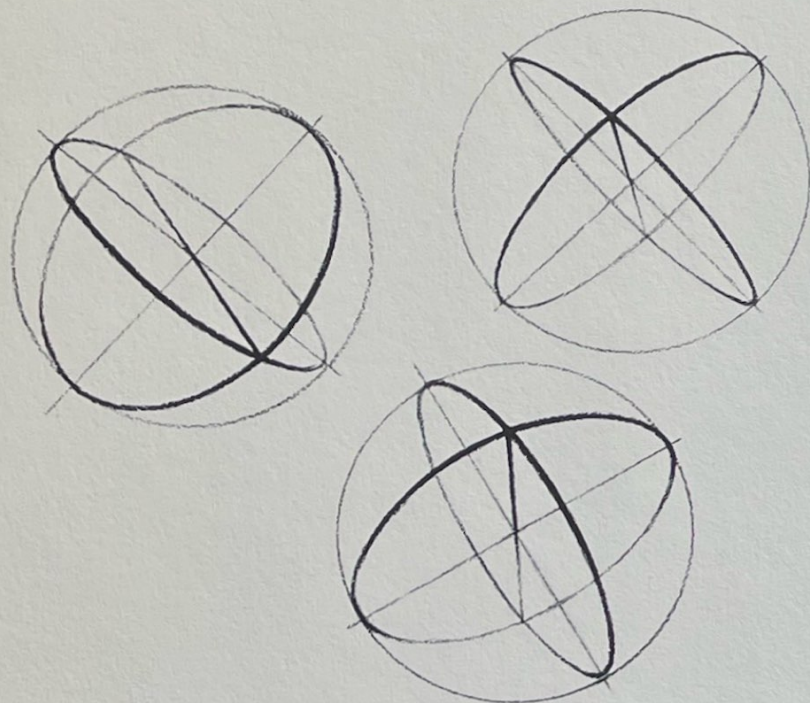
As we discussed before, the shape or "look" of an object is influenced by the position from which it is viewed. To see this effect, hold a circle shape, such as a plate, directly in front of you, so you are looking squarely at the eating surface. It will appear perfectly round. However, if you tip the plate so that its bottom is down, it will no longer be a perfect circle. It is now a foreshortened circle, an ellipse. If you keep it with the eating surface up and raise the plate above your normal eye level, only the underside will show. By dropping it down even with your eyes, you will see less and less of the ellipse and more of the plate's rim or edge. Dropped far below your eye level, the plate will again look round. Note the changes on the demonstration: in each position new foreshortening is illustrated.

Why not experiment to see how this distortion also appears when a rectangular box or cube is seen at different eye levels? Hold a book out in front of you and above your eye level and then gradually lower it until it is even with your eyes. Finally drop it down even with your waist. Look at the book by moving your eyes without changing the position of your head. This way, you will keep the same eye level. If you go slowly, you should be able to see the foreshortening and distortion clearly.

Reverse this experiment by placing several objects on a table top and viewing them from different heights. Every time you change your position, either above or below your subjects, they will seem to change their shape. This change, this foreshortening, can be seen in everything you see and draw.

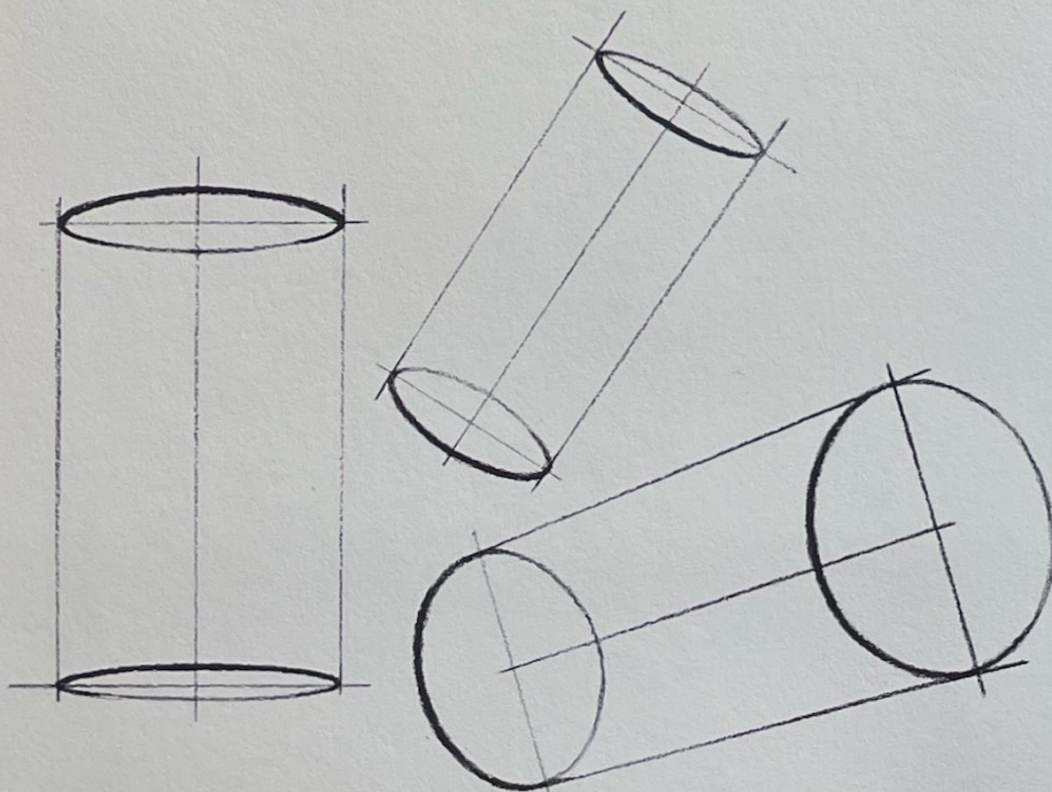
Form Construction

In each drawing you should usually break your work into two general categories. First, and most important, is to capture the large basic form or structure of your subject. And second, to finish the drawing, the surface details need to be indicated. Working in this manner gives the best results for most students. Professionals also rely on this procedure. On the other hand, untrained people usually reverse this order; they draw the details first. And, the results are disastrous! You've seen this kind of drawing where the picture grows and grows — right off the paper! Sketches of figures and heads in particular have this tendency. The features of the face seem so interesting to the untrained artist that he gets them and the entire head much too large for the size of the body. These "monsters" will happen less often when an artist starts con-



When drawing the sphere, you can use your compass to get the large outside shape. To get the feeling of the roundness inside the sphere, you have to draw free-hand ellipses. These will come easily with a little practice.

Some of the most enjoyable construction work for the new student is cylinder drawings. Try some large cylinders, and then try a group of smaller ones. For variety, be sure to have them going in different directions.

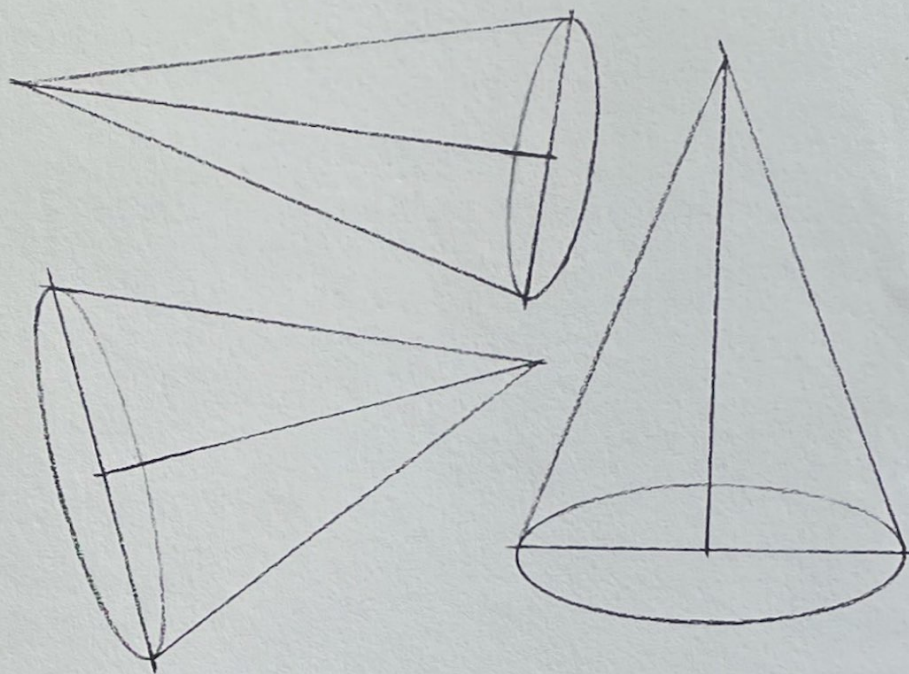


structing the basic forms first, and saves the details till last.

You will find it easy to do construction drawings if you think of yourself as having "X-Ray" vision. By seeing through an object you will be able to "feel" its form . . . its three-dimensional bulk. Remember, form and solidness are needed in realistic art work.

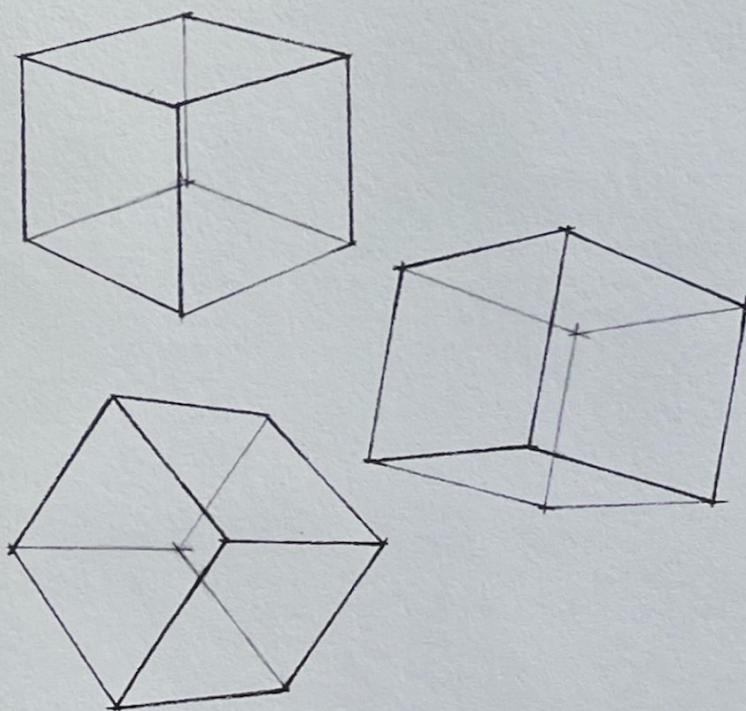
WHAT TO DO

Start with the simple forms on this page. Practice your X-ray vision and your "see through" construction drawing. You will find that it's not difficult, especially if you begin with the basic forms: the cube, sphere, cylinder, and cone. For your practice drawings, follow suggestions in the captions. Remember to stress the three-dimensional "feeling" in your practice sketches.



To draw a cone, combine an ellipse with two straight lines. You will not be able to rely on your compass for the round end; however, you can use your ruler to get the sides straight and clean.

You have probably already done many drawings similar to these sketches of the cube. This is an easy type of construction drawing because you can use your ruler to help you get the sides and edges of the cube straight.



PRACTICE SHEET

Put your final practice work on this sheet and send it to the school with your lesson assignment work and the written test.

Student No. _____ Date _____

Name _____

Street No. _____

City _____ State _____

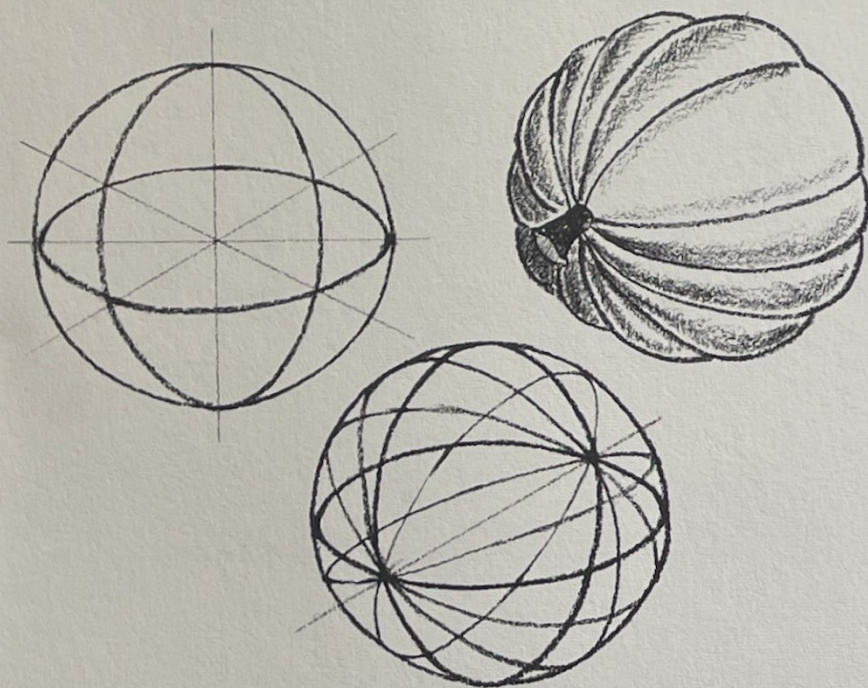
You are well on your way to drawing any object in the world when you can construct the four basic forms accurately. Every object that you see is, in a sense, a combination or a variation of these four forms. With your ability to construct these, you can make the necessary changes to illustrate almost any object imaginable. Always remember to use your X-ray vision and draw out the hidden parts even though they won't show on the finished picture. Constructing the complete object or form, even though a section of it doesn't show, is the best way to make it look solid and realistic.

Now that you have a good method of drawing, you must not overlook the fact that it needs practice. A method or theory can never make you into an artist unless you are willing to apply what you have learned. Reading and studying your textbook is of course a must, but just as important are the hours spent in drawing and

sketching. There are no set rules to tell you how much to practice; each person must work out his own schedule. The one rule that is constant, however, is: The more hours and the more days of the week you practice, the more skillful you will become as an artist.

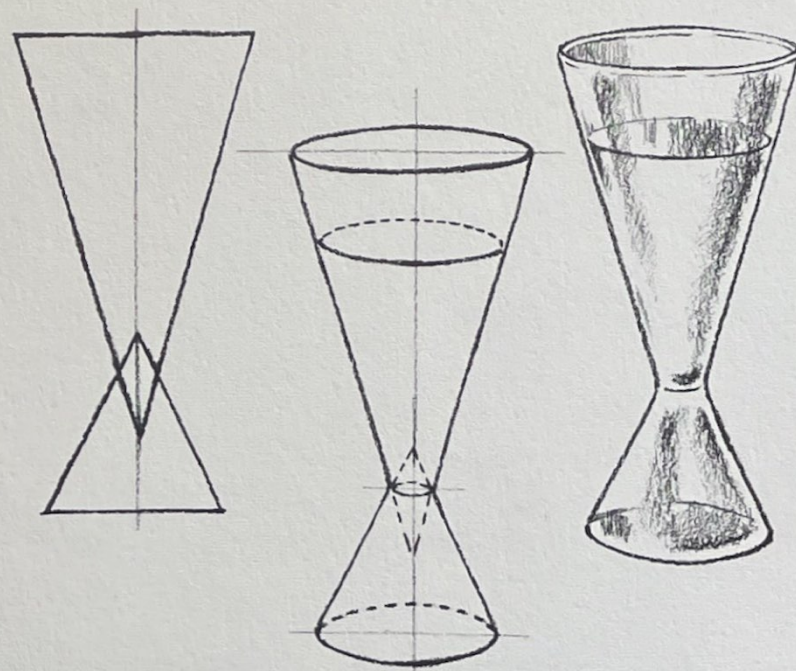
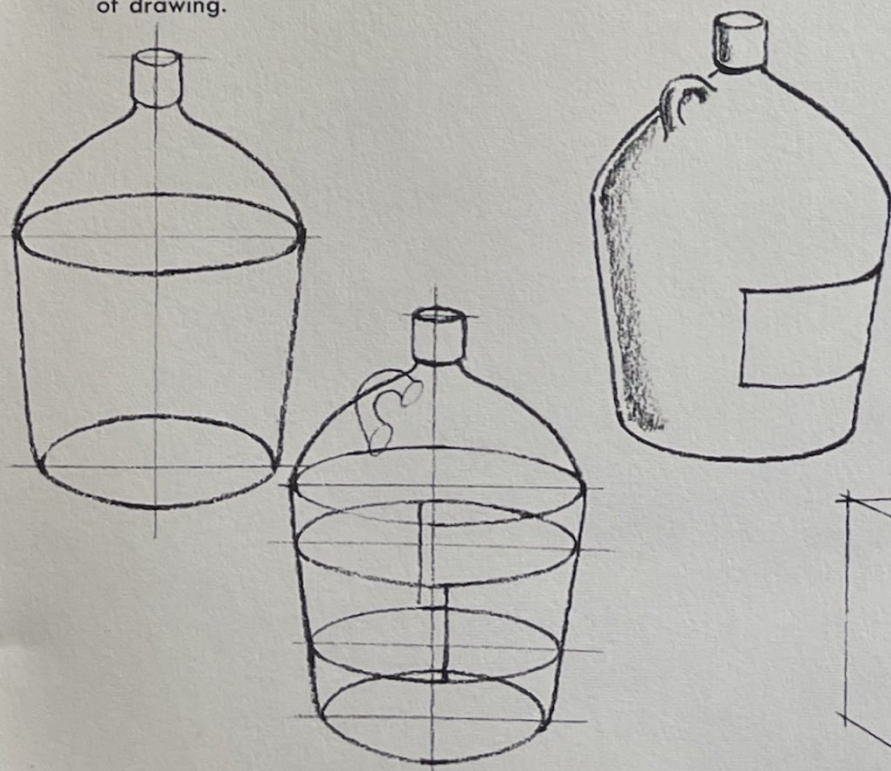
WHAT TO DO

Don't let this day slip by without practicing some of the "construction method" drawings. Copy the illustrations on this page. Then, if you feel really ambitious, pick several objects in your room to draw. Don't forget to use your X-ray vision — the extra time you spend "building" the drawing will be worth the effort. For suggestions related to this practice activity, study the drawings on this page and the captions under each.



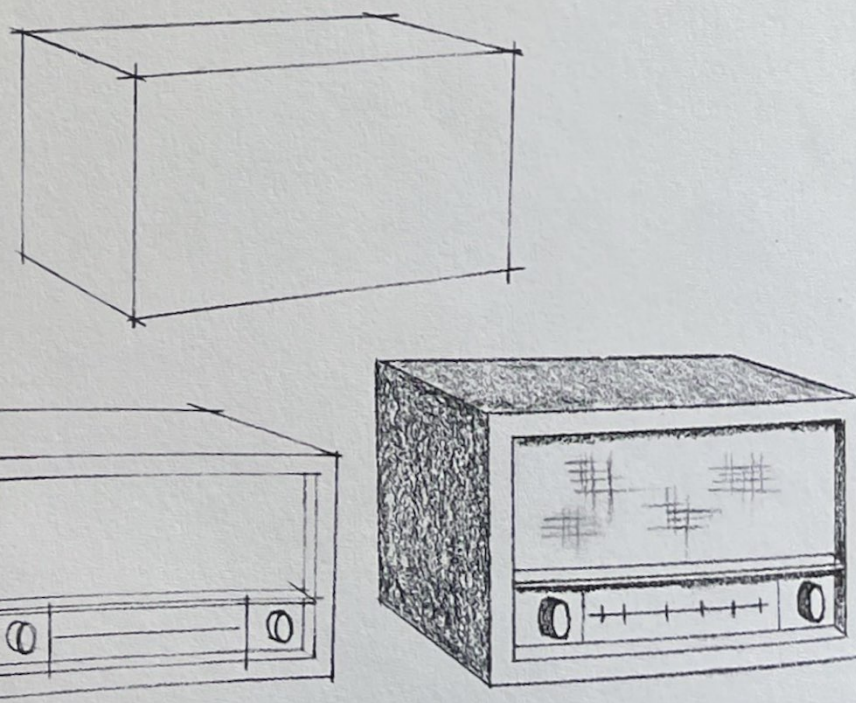
The construction of the sphere lends itself easily to a finished picture of a pumpkin. Earlier in the textbook, you saw how the sphere form was used to capture the shape of a coffee cup. With the sphere form as a guide, and your imagination, you can draw hundreds of interesting objects.

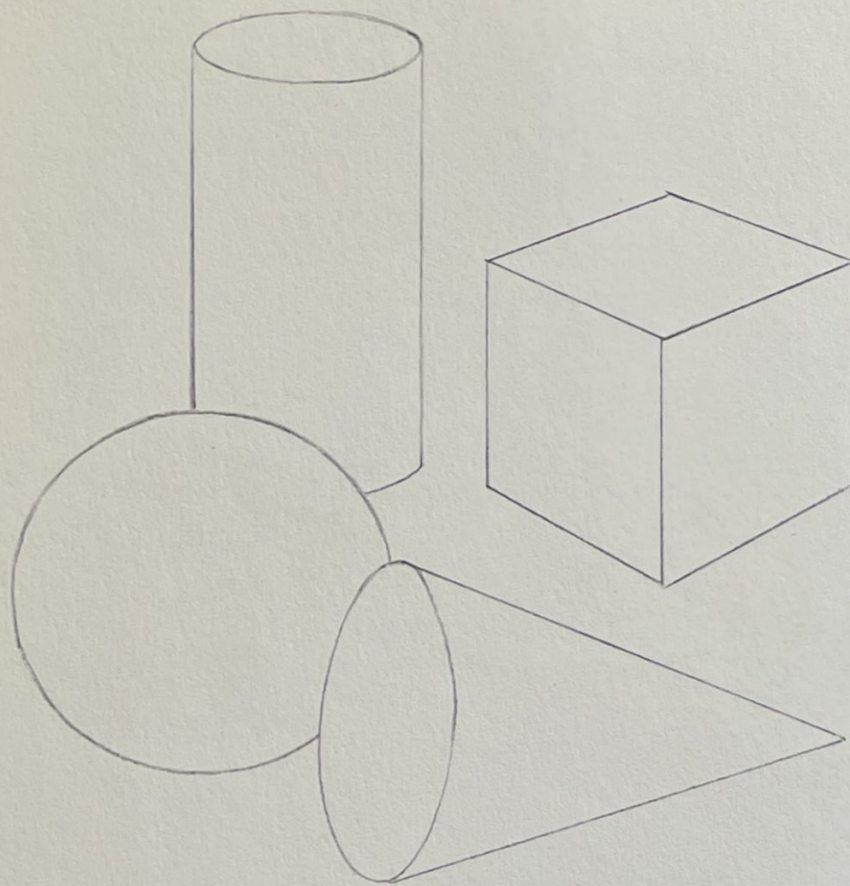
Cylinder shapes are seen around you in every phase of daily living. Drain pipes are cylinders. Many wastepaper baskets are round cylinders. Glasses, jugs, jars, telephone poles, rifle barrels, water pipes, and bottles of all sizes also fit this category. You can illustrate any number of these objects if you use your x-ray vision and the construction style of drawing.



Some pieces of glassware resemble the shape of a cone. This form can also be found in nature. A volcanic mountain looks similar to a cone, as do pine cones, carrots and icicles. There are also many structures which man has built that employ this form. How many can you draw?

Cube shapes lend themselves well to objects such as houses and buildings, not to mention interior furnishings like tables, chairs and sofas. Here is an example of how a simple rectangular box form is used to develop this drawing of a small radio.

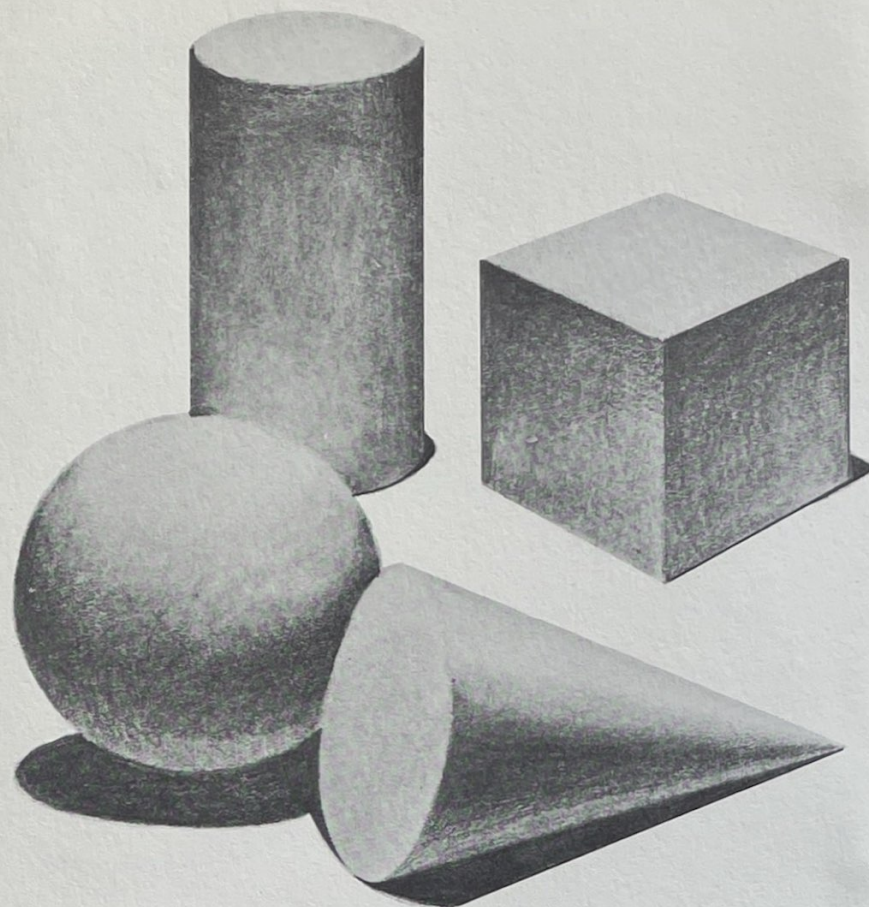




Traditional Modeling

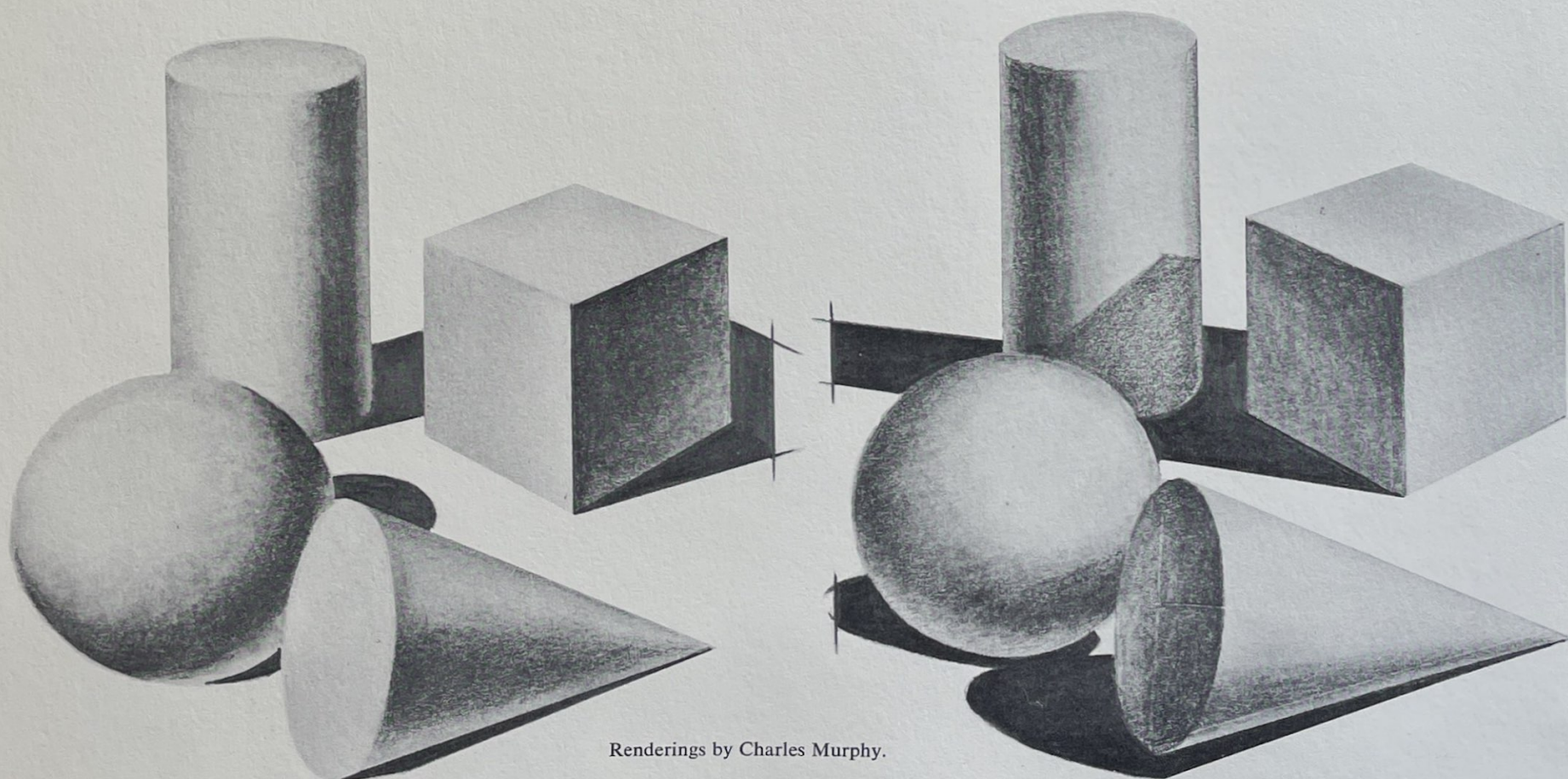
Using a simple outline seems the natural way for most people to begin a drawing. However, if modeling or shading is added, it often makes a drawing more effective and finished looking. Shading emphasizes the form of objects. With the addition of modeling they look more solid and three-dimensional.

On each object there are variations of tone. Notice the sphere. The lightest area is the highlight and the next lightest value is the halftone. Third is the reflected light area at the bottom of the sphere. The fourth darkest value lies between the reflected light area and the halftone area and is the darkest area on the object. This is known as the shadow edge. And, a cast shadow "falls" on the ground beside each object. This is the darkest of the five areas.



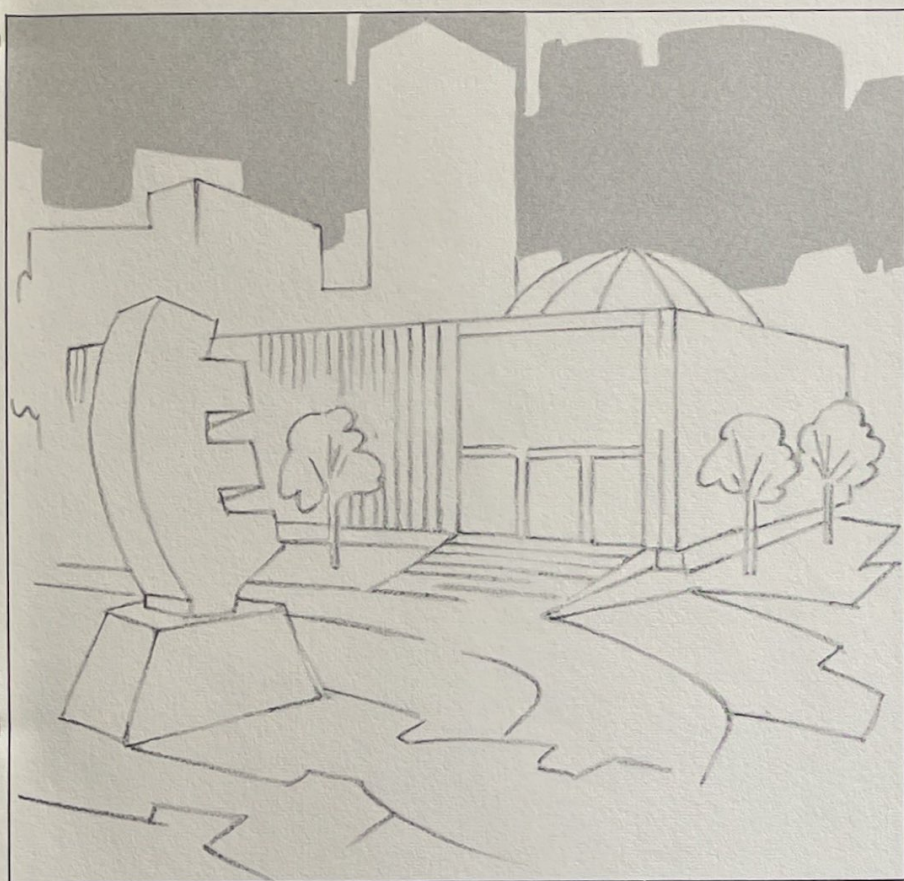
Compare this second illustration with the first to see how the light and shadow patterns have made it more realistic looking. The objects now seem to actually come forward and go back into space. This illusion of space and depth is created primarily by using a strong light source and the resulting shadows. This art was lit from above.

In modeling, you need strong contrast: areas of black, plus the white of the paper for highlights. Cast shadows are also important. They are always located on the side opposite the source of light. On this picture they "fall" on the left which means the light is coming from the right. Be careful placing cast shadows... if they don't fall away from the light source, it will distort the realism in your drawing.



Renderings by Charles Murphy.

Contemporary Modeling



Showing form with light and shadow patterns is a part of rendering most traditional realistic art. This style is found in many contemporary pictures, too. Even when blending or shading is not emphasized in a decorative picture, a wide range of values is important to give the art solidity and form.

The addition of this lighter gray illustrates two important phases in modeling a picture. First, this gray helps tie the shadows together making the objects appear even more solid; second, it marks the size and location of the highlights. These two items should be clearly established before the artist starts the final details.



This drawing is still extremely simple, yet it now begins to have a "feeling" of space and perspective. These qualities, plus a solid three-dimensional look come from adding strong dark shadows. Note how they cling to the right side of each object. Note also the cast shadows.

In the completed picture more light and dark accent details combine to make a pleasing all-over pattern. This, you'll remember, is not a realistic modeling of form but is a more decorative, stylized interpretation. Highlights, cast shadows and halftones come into play, although reflected light and the shadow edge are not often needed in this style of modeling.



Step by step demonstrations by Ray Dowsett.

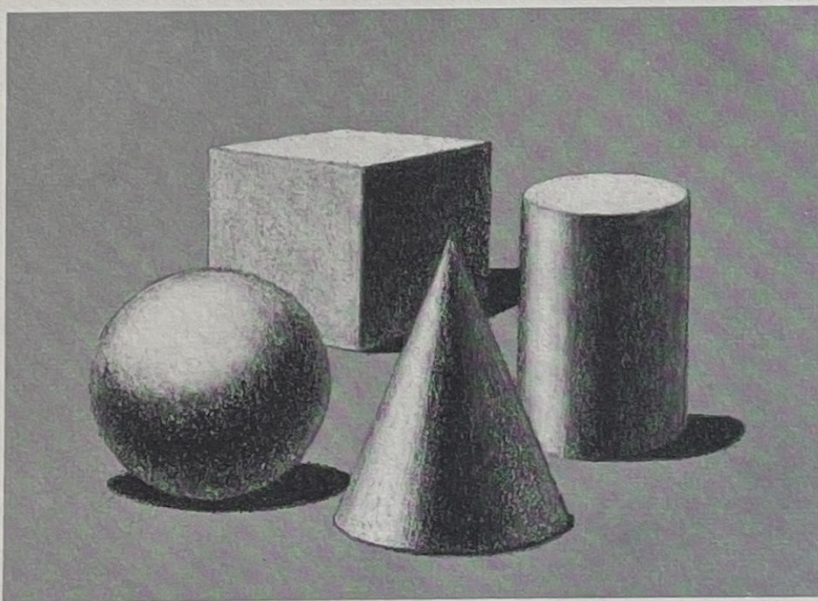
Form In The Human Figure

Studying form may seem a little difficult at times because, if you're like most students, you would prefer to draw people and animals rather than cylinders and cubes. But truly, if you can draw cubes and cylinders, it usually follows that you are able to draw the form in figures, too. And, as you will soon see, the ability to do successful animal sketches is also influenced by your knowledge of drawing these basic forms.

You must be able to draw form well if you are going to do realistic convincing figures. Form, you'll remember, means a solid three-dimensional object . . . something that fills space. This same description also applies to the human figure — it is a solid, three-dimensional form that occupies space. Next, you've learned that artists divide forms into four general groups: cube, sphere, cone and cylinder. You also discovered that objects aren't always like one of these basic forms, but have many variations. In the human figure this last principle is especially easy to see. A good figure sketch should never look like the "Tin Man" from the Wizard of Oz! Bones and muscles produce many subtle changes and variations in figures.

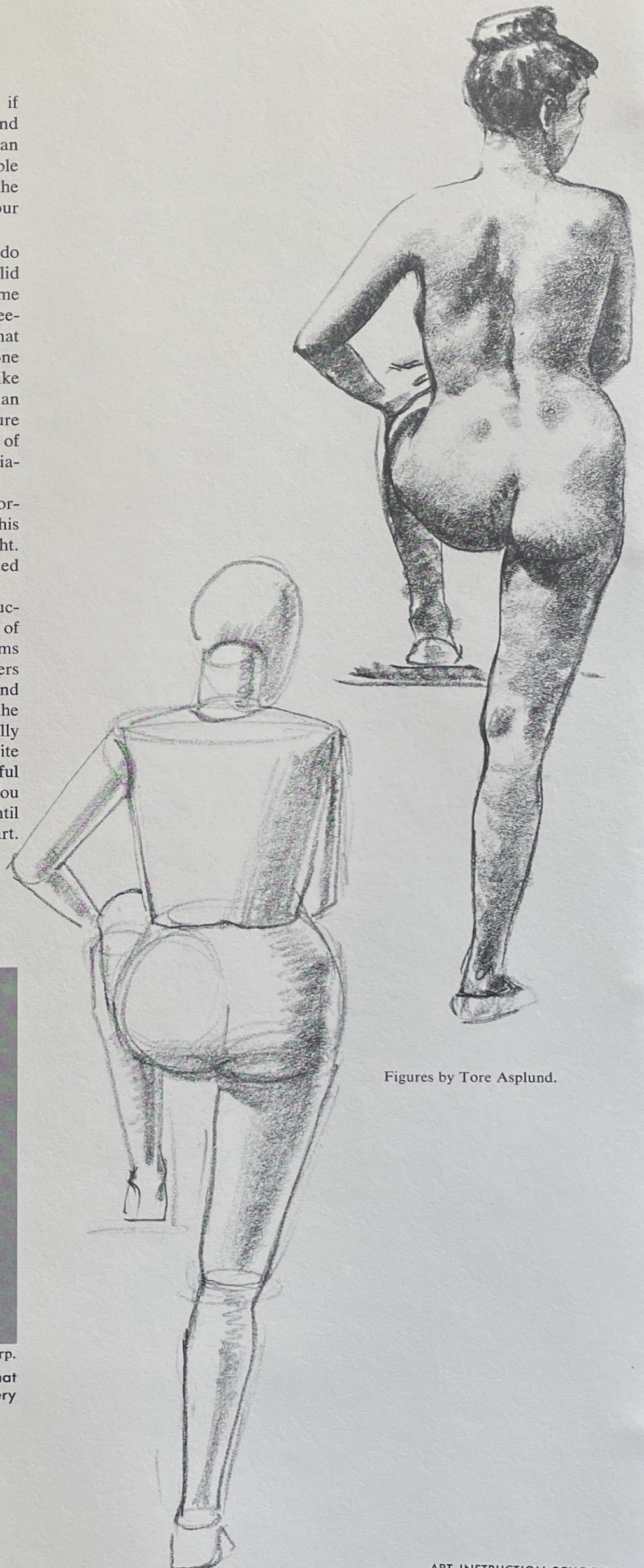
Modeling and the use of a strong light source are other important items in developing form drawings and figure art. For this sketch, the artist used both modeling and a definite source of light. You can tell by the "fall" of the shadows that the light was located to the left and slightly above the young lady.

In his first preliminary sketches, the artist drew with a construction method, building up the large basic structure. This method of working "simple to complex" is useful to establish the basic forms before working on the surface details. Note how simple cylinders express the roundness of the arms and legs. And, in the head and lower trunk, the sphere shape is evident. The upper trunk, from the waist to the shoulders, is a variation of a cylinder: it is basically round, though it is wider at the shoulders. This sketch is quite mechanical looking, yet drawing in this manner can be helpful when you are first learning the forms of the human figure. If you can see in this simple fashion, it is only a matter of time until you can polish your work into professional looking, realistic art.

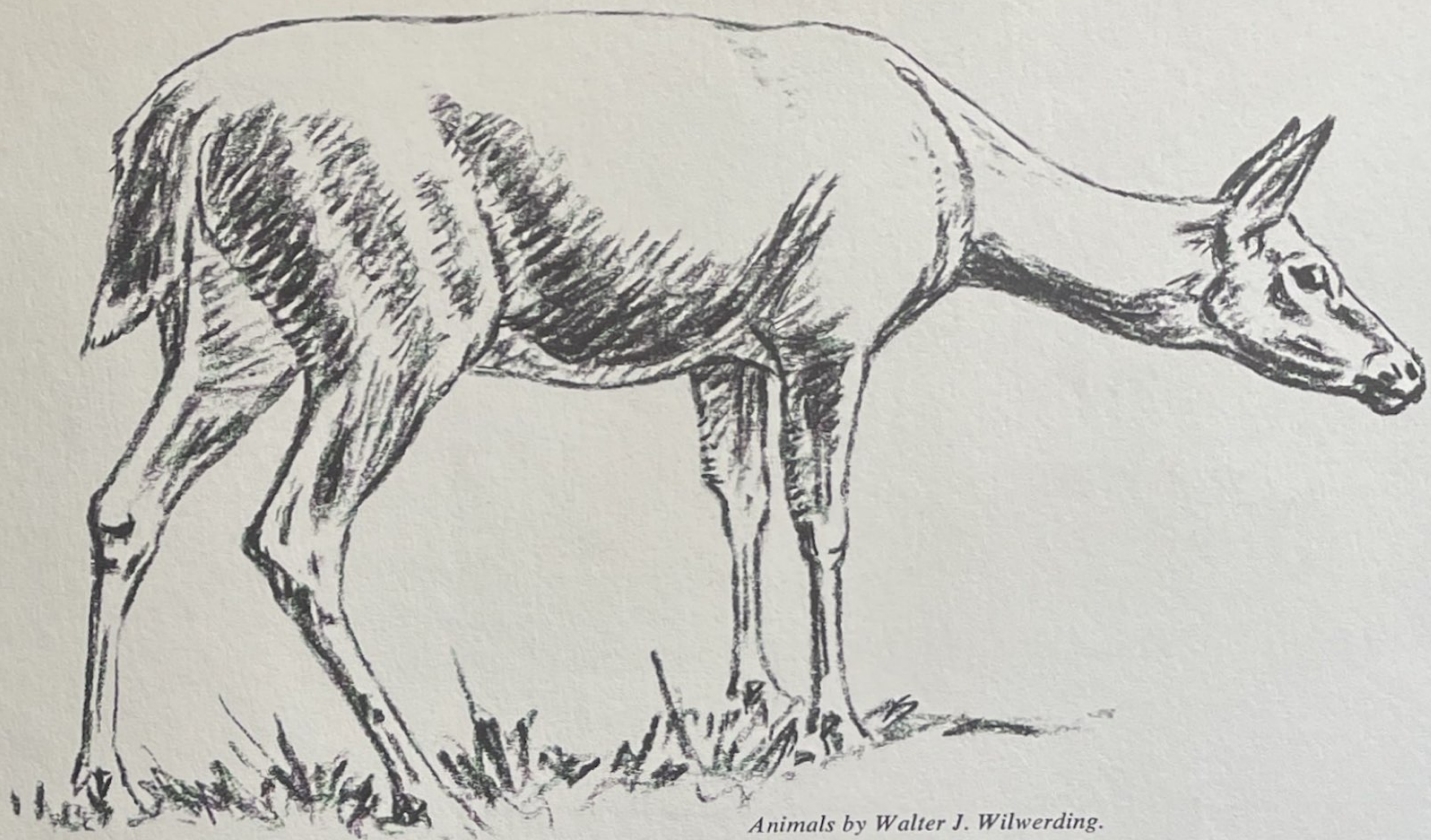


A study by George Terp.

The four basic forms, the cone sphere cylinder and cube are guides that can help you in all your future art work. These forms are found in every object you draw. Memorize them — they're important.



Figures by Tore Asplund.



Animals by Walter J. Wilverding.

Form in Animals

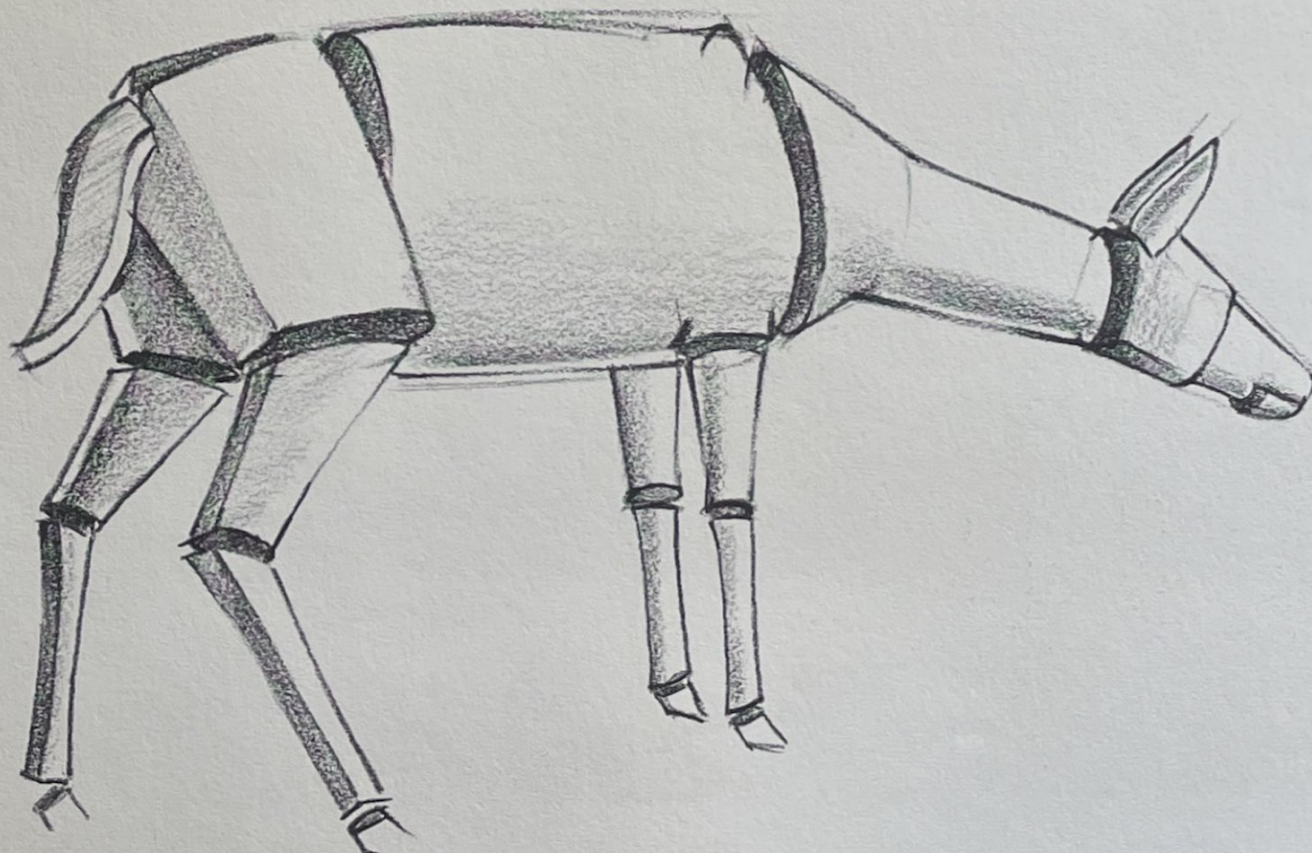
Most artists enjoy sketching and painting animals. And, whether you draw a family pet or work from a photo of some forest creature, you'll do better if you use form in your art. The same methods needed to do the four basic forms, and figures, are also important in drawing animals.

On these two illustrations of the white-tail deer, you can see how form played its part. In the realistic sketch it is evident, just as it is on the special construction demonstration. On the first drawing the artist used many details to show form. Simple cubes and cylinders bring out the structure on the second example.

Art students sometimes have trouble with their drawings because many animals have thick, furry coats. Stripes, spots and color combinations also may "blind" a beginning artist. Using a see-through construction method can overcome some of these difficulties. However, you should try to avoid animals with this kind of coat at the beginning. If you have the choice of studying a shaggy

Collie, or a sleek Golden Retriever, you should pick the retriever. On this animal, you can see the form easier — and do a more life-like drawing. Using your knowledge of cubes, cones, cylinders, and spheres should also guide you to more successful results.

A good exercise that will develop your ability to see form is drawing over photos and art work in magazines and newspapers. Take any large, clear photograph, illustration or piece of advertising art and over this place a sheet of transparent tracing paper. Now, on the tracing paper, make a copy of the printed art, but don't try to show every single detail. Don't copy the folds in the clothing, or the fur on animals. And, don't define the bark or leaves on a tree. This practice is not to make an exact copy of the original but to find how the artist has used *form* to make his work convincing. Use your x-ray vision. On an arm, for example, draw it as several jointed cylinders. On all the areas, keep it simple . . . stick to the basic forms as much as possible.





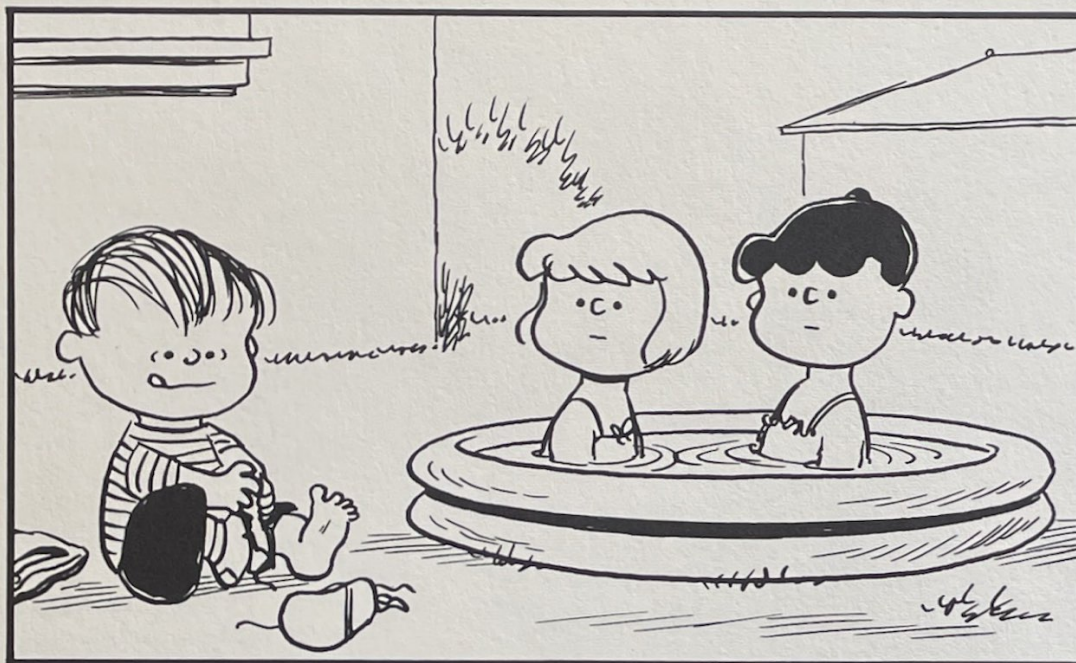
Casein painting of diesel engine by Roswell Brown, former student of Art Instruction Schools.

Form in Commercial Art

This commercial illustration has some beautiful examples showing foreshortening and perspective of forms. The main subject, the train, gets larger as it comes into the picture. The metal over-structure is also larger in the front, on the near side of the train, and smaller on the side that is farther away. In the background buildings, good placement of light and shadow patterns depict these solid, three dimensional forms.

You can bring your creative imagination into play to see the solidness of the over-structure above the train. This is really a (solid) cube-like form! The diesel engine can be thought of as a solid box, and behind it, the tank car is almost a perfect cylinder.

The last point to note is the ground the train is traveling on. The bed for the tracks and the footing for the over-structure is really a solid flat form just like a table top. The artist, when he planned this picture, no doubt, started with this idea and then "constructed" the train, buildings, etc., on top of it.



A "Peanuts" cartoon by Charles M. Schulz.

Painting by Walter Parker for the Humble Oil and Refining Co. Reproduced through the courtesy of Wilkinson-Schiwetz and Tips, Inc., Houston, Texas.

Even in a very simple style of drawing an artist uses form to give his work "life". In this "Peanuts" cartoon, there are very few details, no color, and almost no modeling. Nevertheless, each object and figure looks solid and three dimensional. On the background buildings, you see perspective and foreshortening used to show form: each building gets larger as it comes into the picture. In the foreground, the wading pool has the form of a short, wide cylinder. And, the figures inside the pool, follow the theory of arranging objects in an imaginary package. In this cartoon, however, the water takes the place of the negative (air) space.

The little characters, themselves, are good examples of "creative form." They do not follow the realistic structure of human figures, nor do they correspond exactly to the four basic forms. Yet, each is a solid, chunky, thoroughly charming little sprite.



After you have enjoyed the action and excitement of this illustration you should plan to use your x-ray vision on it. Being able to see more than the ordinary viewer can see is your job. As an artist, you must do more than just look at a picture. You must study it.

When you look past the details and colors of this illustration, you will see that the artist has made good use of form in this work. On the boys' helmets, modeling was used to show the roundness of these spheres. The boys' heads also suggest this solid shape of the sphere. Their necks are cylinders, as are their arms and legs. In the chest and stomach region, it isn't possible to find a simple basic form. Still the feeling of solidness and depth is easy to see. And, although the background is extremely simple, there is form here, too. This area has depth — you don't get the impression that the boys are pasted up against a flat wall.

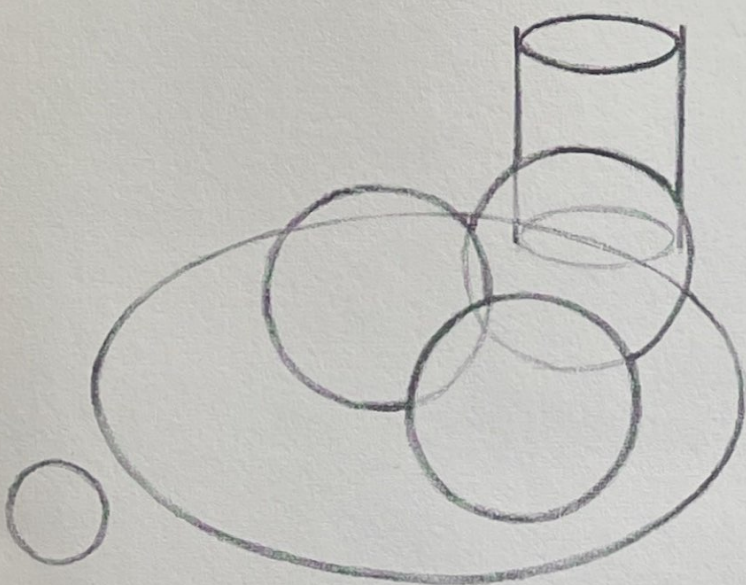


Vincent Van Gogh, Tate Gallery, London.

Another mark of a great artist is his ability to see beauty in the most common everyday object. Or, to take a very familiar subject, such as a chair, and give it new importance through sensitive creative painting. For the visually sensitive person, any object can serve as inspiration to make a beautiful piece of art.

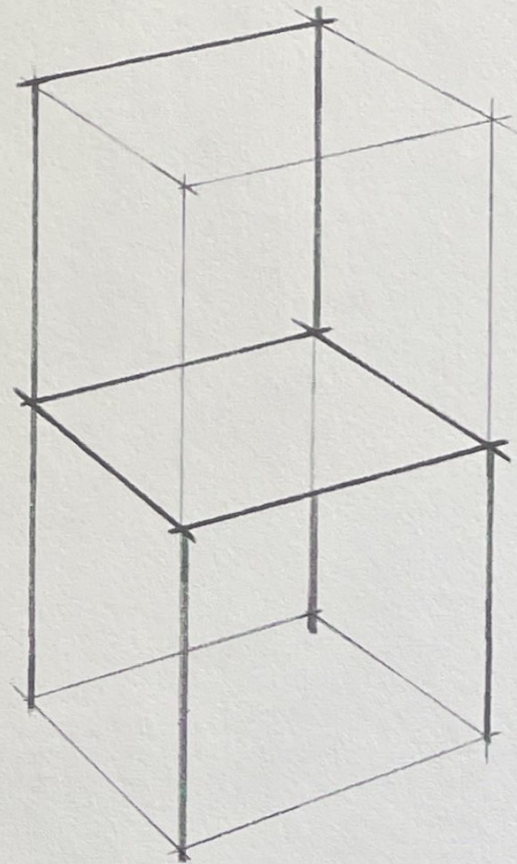
As in all representational or realistic painting, the artist is concerned with capturing the form and solidness of his subject. Color details and textures are important, but these, without form, do not add up to good sound art. In this painting the chair looks solid . . . almost powerful. The feeling comes from the repetition of the cylinder forms in the legs, cross-braces and back. Clean geometric patterns on the floor and background also help emphasize the form and solidity of this painting.

Spheres and cylinders hold the center of interest in this detail of the Cezanne painting. In the demonstration drawing you can see how the artist avoided monotony by varying the sizes of the forms.



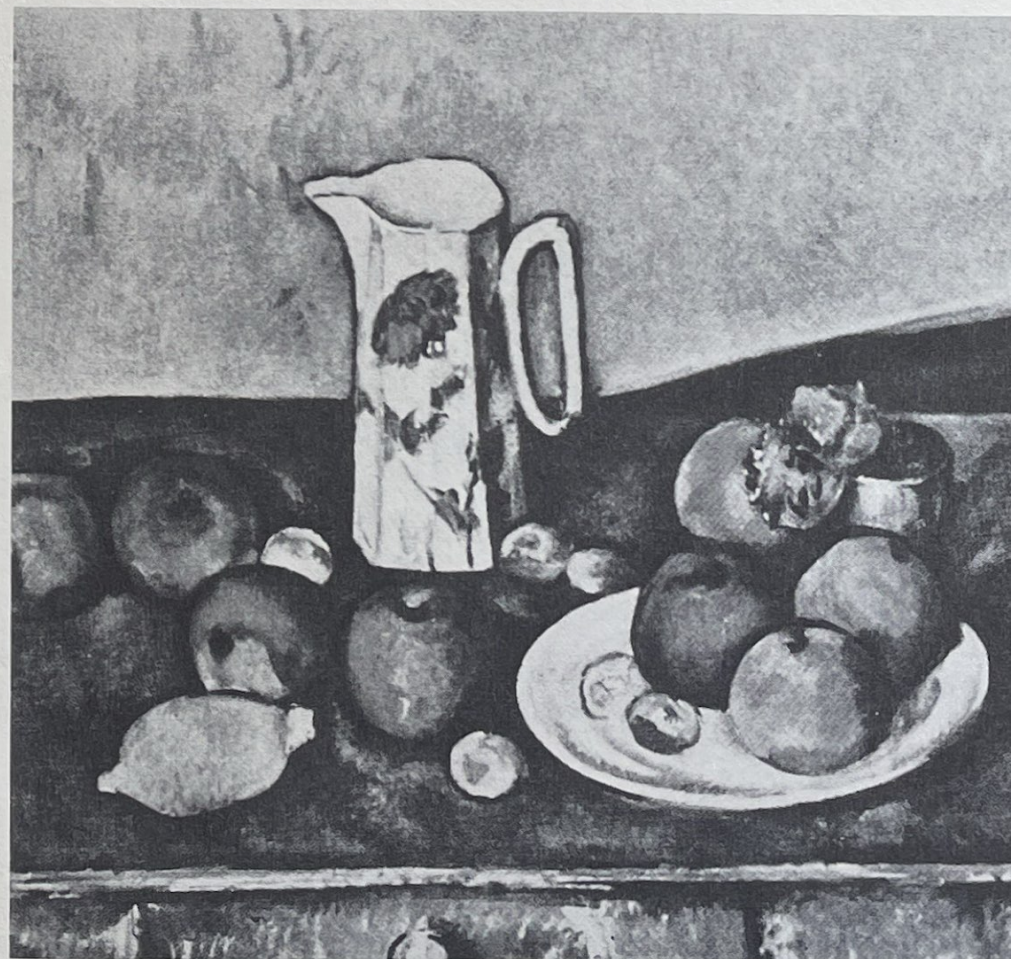
Still Life by Paul Cezanne, National Gallery, Oslo.

Study Van Gogh's painting closely and you will see that the chair is composed of two cubes. These are not perfect squares but have been distorted slightly for a more engaging effect.



In this painting, the subject matter is based on three of the four basic forms. The fruit, though varying in color and shape, are principally ball-shaped spheres. A cylinder form is clearly seen in the pitcher, while the table is a member of the cube family. The only basic form not represented is the cone.

Only a small area of the total space in this picture is filled with positive forms: the plate, fruit, table, etc. Almost all of the background can be considered negative or unused space. This negative "air space" flows between the background and the objects; it also circulates between the individual objects. None of this space, however, is deep space as you might see in a landscape, but is quite shallow or limited. This competent handling of form and imaginative use of space is the sign of a truly creative artist.



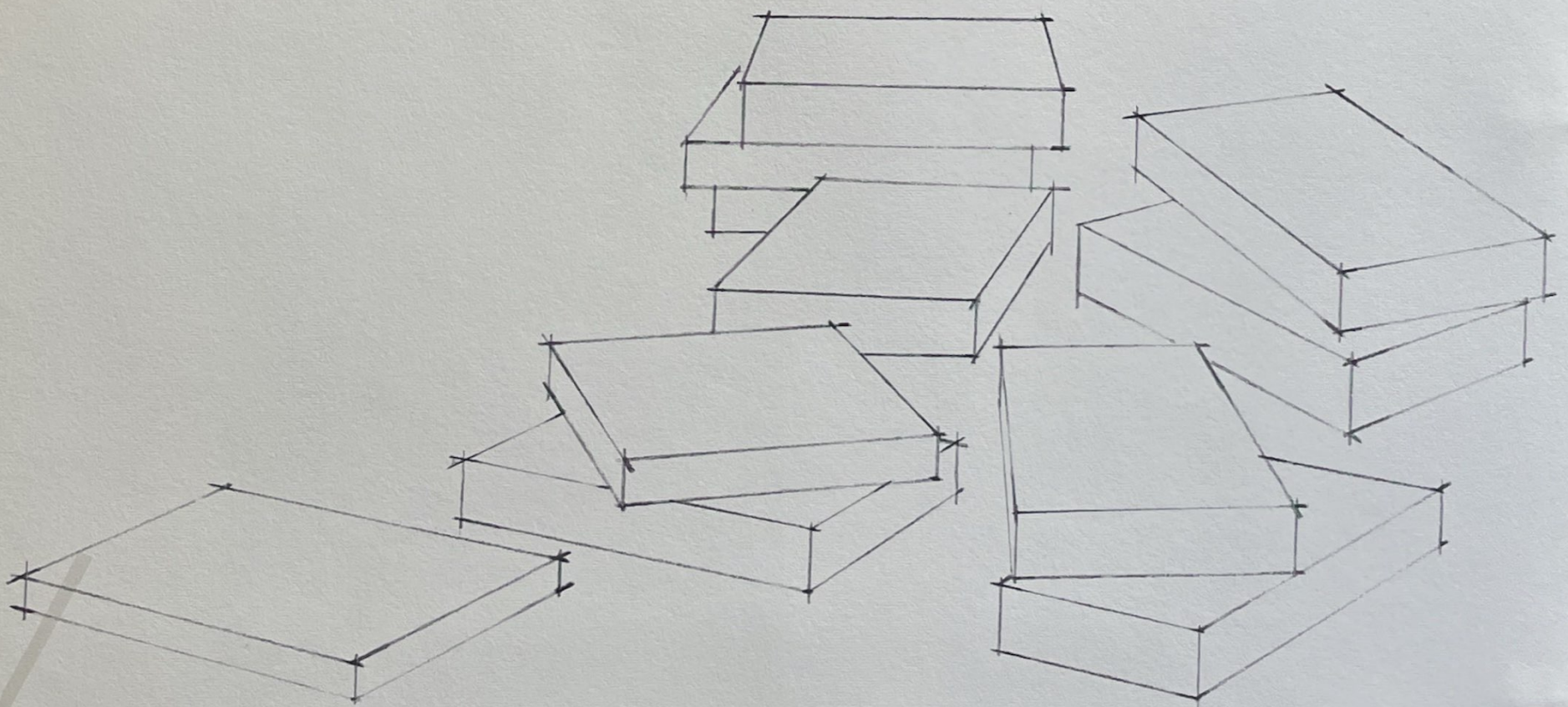


Still Life Of Books by Vincent Van Gogh, in the Van Gogh Collection.

Painters through the centuries have been working with the form of objects. Very often they are even more aware of form and structure than commercial artists are. Because of deadlines and budget limitations, commercial artists often don't have time to see the "real" object that they use in their illustrations. These people have to rely on photos from their clipping file. And, a photo must always be considered as a substitute for the real object.

Still life painting is the painting of inanimate objects such as fruit, flowers, driftwood, bottles, drapery, etc. This type of subject is well-suited to fine artists because they can arrange them with common objects from their own studio. This composition of the books is a fine example. Books, for most people, are to be read and then put away on a shelf. For this artist, their various colored bindings and strong rectangular forms served as both an inspiration and a challenge. Try a still life like this yourself. See how easy, yet how difficult, it is to make an interesting study using just a group of ordinary books.

Books are not exact cubes but they are closer to this basic form than to any of the other three. Any box shaped, flat sided object should be considered as a member of the cube family. Thinking of this will help you illustrate this type of form more accurately.



Checking Up On Yourself

Do You Remember That:

1. A strong source of light is important to model the form of objects.
2. When an object is seen at different distances it appears to change shape.
3. By drawing form, rather than just coloring in shapes, the artist can give the illusion of space and depth in a picture.
4. You can establish the outside shape of a sphere with your compass.
5. Foreshortening and distortions appear when objects are viewed from different eye levels.
6. The shadows always fall in a direction away from the light source.
7. Even simple cartoons make use of form.
8. Form, color and texture are the way we tell the difference between objects.
9. It is helpful to fit objects into an "imaginary package" to find their simplest form.
10. Distortions and foreshortening appear in almost all form drawings.

Did You:

1. Use your x-ray vision when doing construction drawings?
2. Try setting some objects on a table or in a box to study the negative space?
3. Make a list of objects in your home and try to reduce them to one or more of the basic forms?
4. Try to work out a study plan to arrange a certain number of hours for practice each week?
5. Find that your new knowledge of form has improved your drawing ability?

FORM LESSON

Modeling is a very important method of showing form in your drawings. Because you will often use this system in the future, you need to be absolutely sure you know how to render highlights, half-tones, reflected light, the shadow edge, and cast shadows. On these three drawings, you are going to use your 2H, HB and 2B pencils to model form. You will be graded on neatness, but more important, your work will be judged on how well you can suggest the solid three-dimensional appearance of each object.

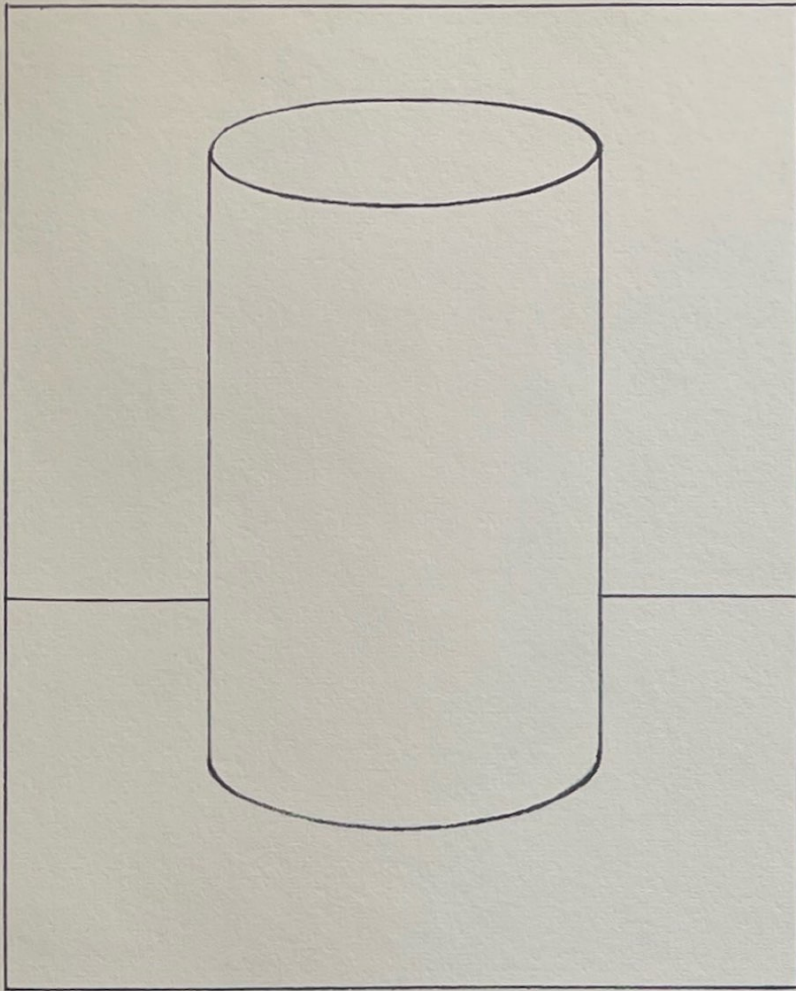
#1. On the first picture the outline of the cylinder is provided so you won't have any trouble with the actual drawing. In your work, the light should be coming from the upper left corner. Remember that the shadows always fall in a direction away from the source of light. When finishing this first drawing, you need to indicate tones on the cylinder and on the background and foreground. Leave only the white of the paper for the brightest highlight on the cylinder.

#2. For the second drawing, you can again use your pencils to model the form. Start by completing the outside edge of the sphere and then the lines dividing the foreground and background. Place the light source in the upper left hand corner and indicate a cast shadow. Use tone on the sphere, the background and foreground. Use strong contrast with only the white of the paper for the highlight.

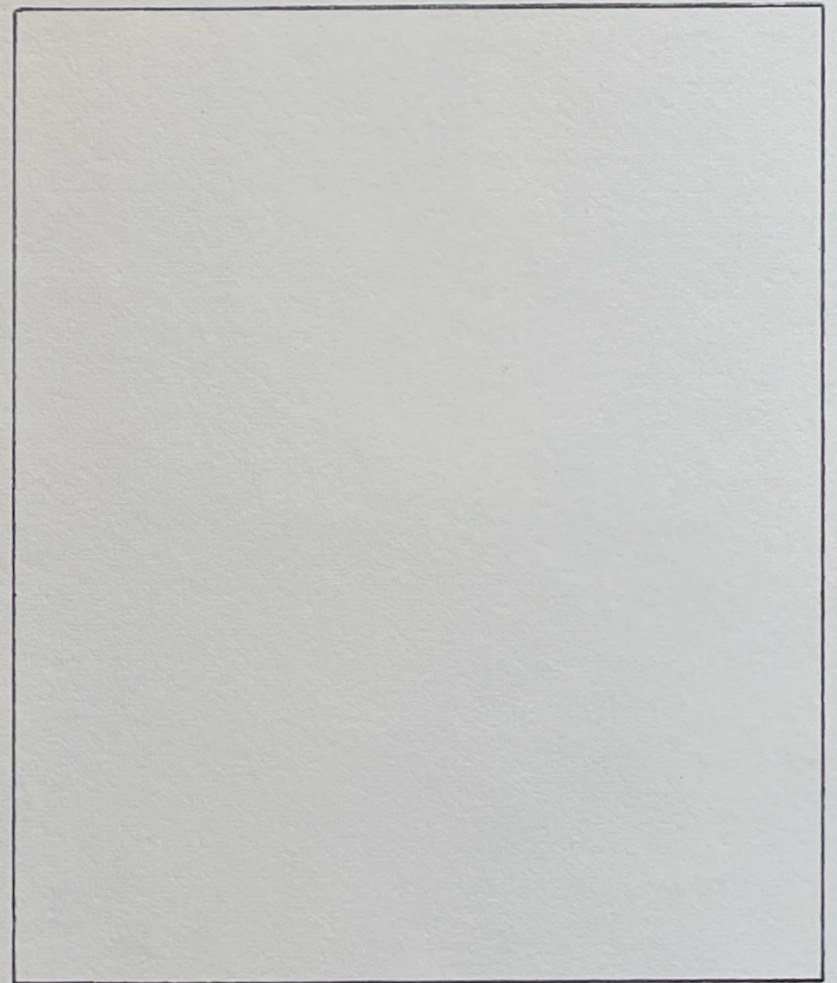
#3. In the third drawing, set up your own objects near a window or other source of light so that they are lit from the upper left similar to the first two pictures. You have the choice of showing: (1) an orange and a banana, or (2) an apple and one of your tempera paint jars, or (3) two of your tempera jars; one sitting upright and one lying on its side. If you choose the jars of paint, turn them so most of the label is hidden from view. Remember, you are not going to be graded on showing small details or lettering. For this lesson we want to see how well you can model form. Again, use shading on the foreground and background as well on the objects you choose. Show a highlight, cast shadows, reflected light, and so forth.

When you are through with the picture quiz, these three drawings, the true-false test, and the multiple choice test, put your name, address and student number on the back of each. Mail your lesson back to the school and then, "get going" on your next subject!

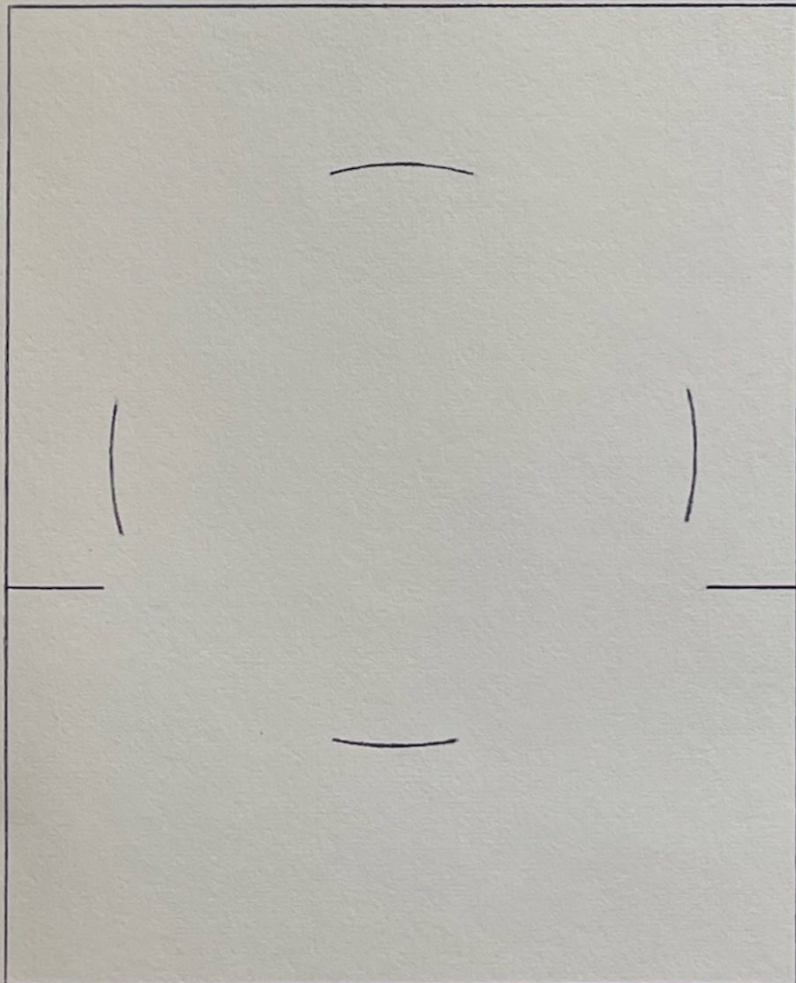
FORM LESSON ASSIGNMENT



#1.



#3.



#2.

FORM LESSON ASSIGNMENT

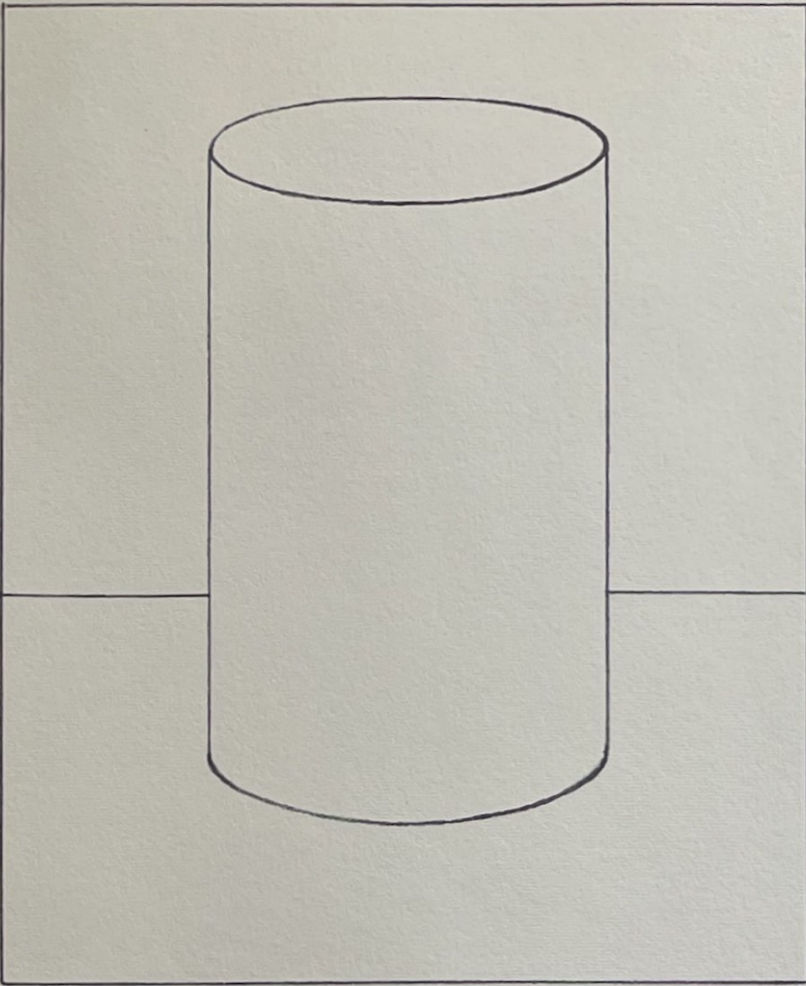
Student No. _____ Date _____

Name _____

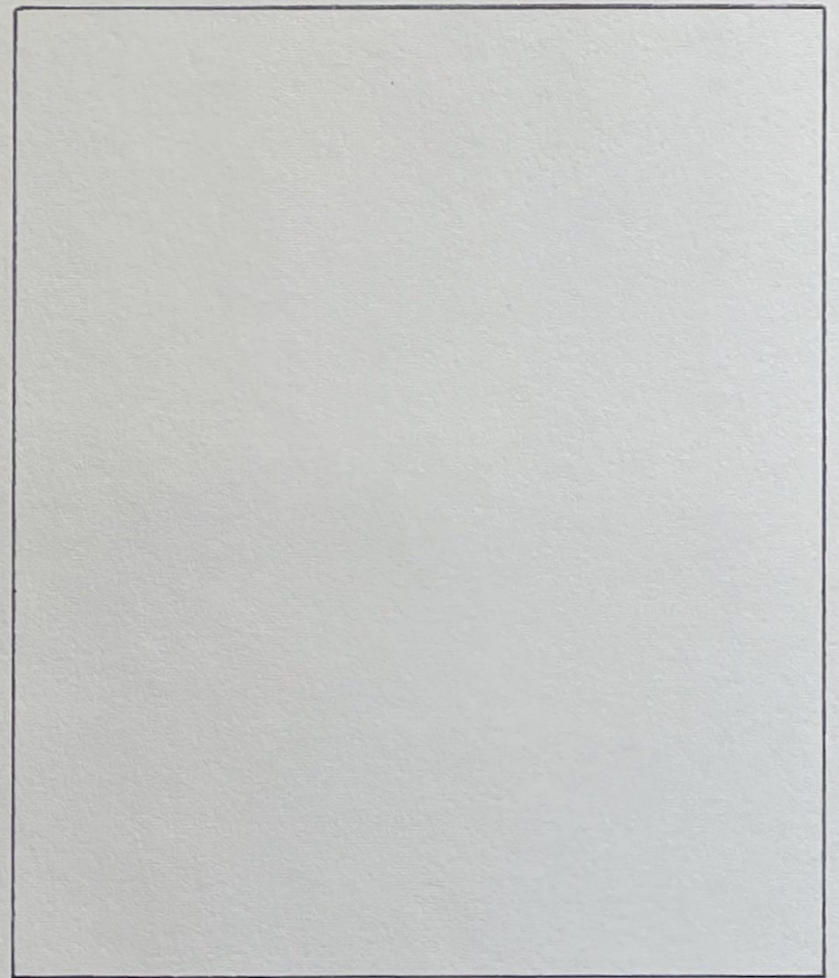
Street No. _____

City _____ State _____

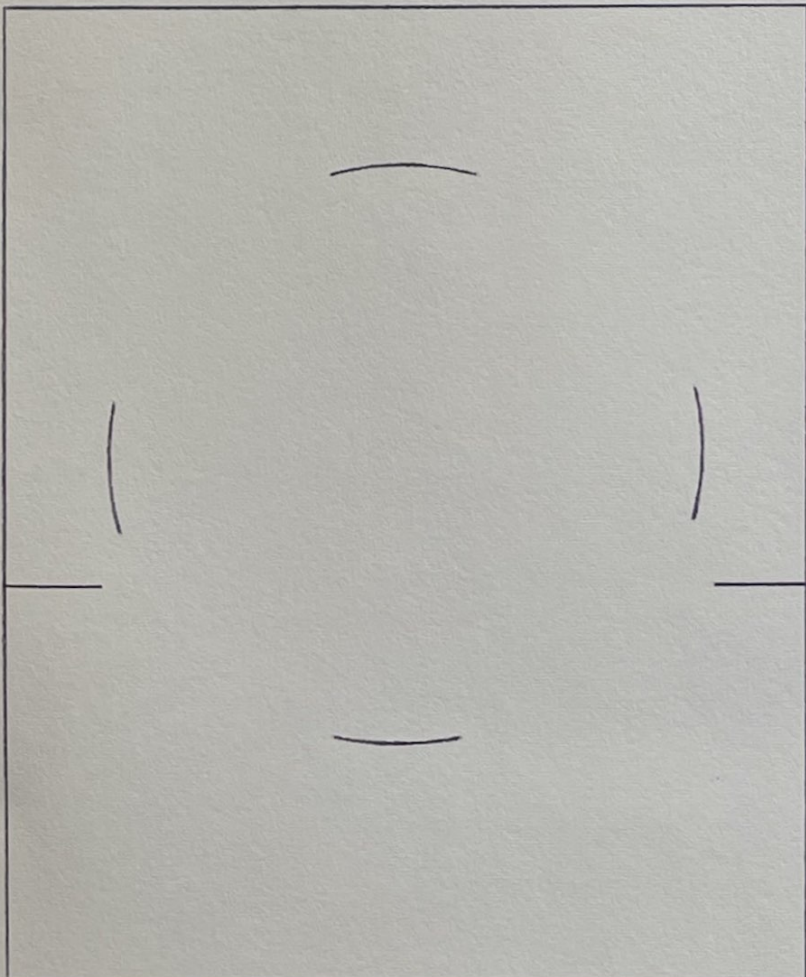
FORM LESSON ASSIGNMENT



#1.



#3.



#2.

FORM LESSON ASSIGNMENT

Student No. _____ Date _____

Name _____

Street No. _____

City _____ State _____

Form Picture Quiz

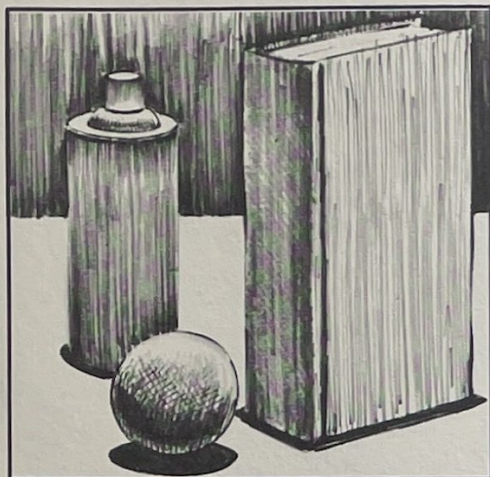
The placement of highlights and shadows must be carefully done when shading and modeling form. If this relationship is not correct the picture will look confusing. In the next eight pictures you can see how well you have learned this principle of modeling.

In the first four (4) sketches, each picture has been lit from one of three different directions. Beside the pictures are boxes where you can check the direction or placement of the light source. If, for example, you think the light is directly above the objects, mark an X in the box marked "above"; or, if the light appears to come from

the left, mark an X in the box for "left". Study the highlights and the "fall" of the shadows carefully before making each decision.

In the last four (4) pictures the artist has not followed the rules of light and shadow placement correctly in each picture. Some are correct, others are not. Study the shadows in each sketch and then use the boxes to mark whether the shadows correspond or disagree with the rules. Don't hurry on these or you might get fooled!

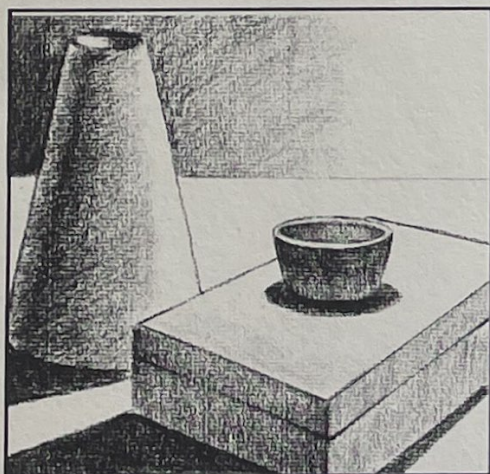
Be sure to put your name, address and student number on the back of this quiz. When you finish the quiz, plus the drawing assignment and the true-false and multiple choice tests, mail your work in to the school.



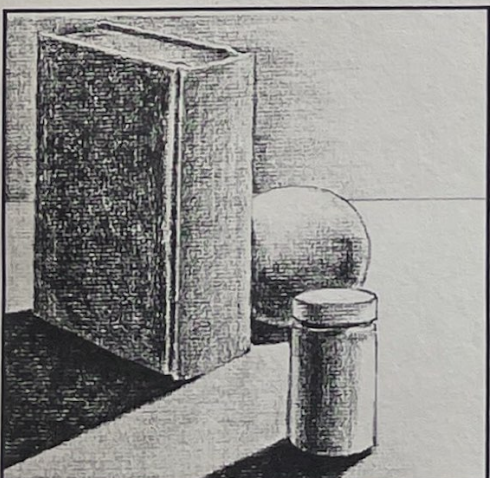
RIGHT ☐
LEFT ☐
ABOVE ☐



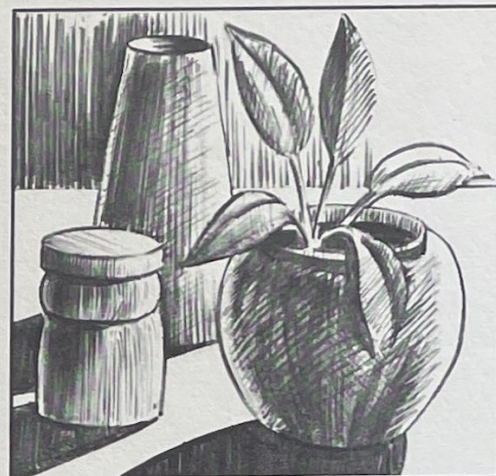
RIGHT ☐
LEFT ☐
ABOVE ☐



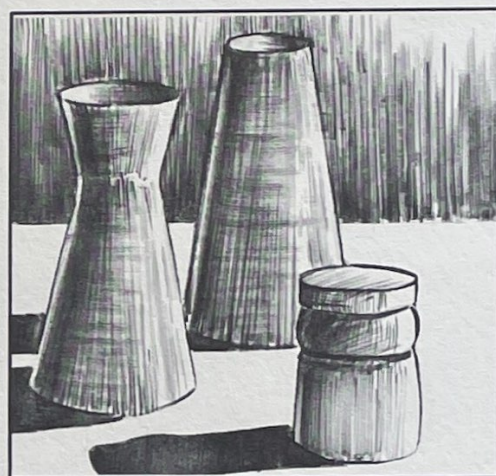
RIGHT ☐
WRONG ☐



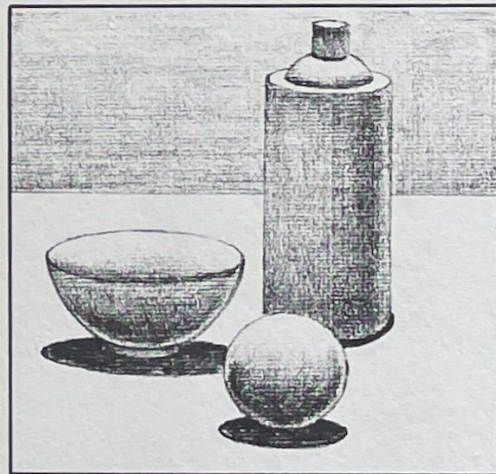
RIGHT ☐
WRONG ☐



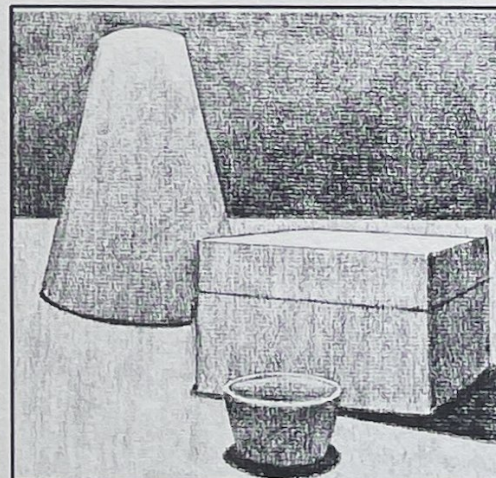
RIGHT ☐
LEFT ☐
ABOVE ☐



RIGHT ☐
LEFT ☐
ABOVE ☐



RIGHT ☐
WRONG ☐



RIGHT ☐
WRONG ☐

FORM PICTURE QUIZ

Student No. _____ Date _____

Name _____

Street No. _____

City _____ State _____

FORM TEST

Directions: Study each question before choosing the correct answer. For the True-False questions, put an X in the box under "T" if you think the statement is correct or True. If you think the statement is wrong or False, put an X in the box under the "F".

For the Multiple Choice questions, read the entire question before choosing an answer. After you have selected the answer you think is best, write the letter for this answer in the space next to the question number.

Complete the test and send it to us with your other assignment work.

True-False Questions

- | T | F | |
|--------------------------|--------------------------|--|
| ☐ | ☐ | 1. The four basic forms are the cube, sphere, cylinder, and cone. |
| ☐ | ☐ | 2. It isn't ever necessary to have a strong light source when shading or modeling. |
| ☐ | ☐ | 3. Working "simple to complex" means that you don't draw details until the large basic forms are done. |
| ☐ | ☐ | 4. An imperfect, foreshortened circle is called an ellipse. |
| ☐ | ☐ | 5. Professional artists never have to start with the simple construction method in their work. |
| ☐ | ☐ | 6. Cubes and rectangles are members of the same "box" family. |
| ☐ | ☐ | 7. Common objects can always be reduced to one basic form. |
| ☐ | ☐ | 8. The basic shapes aren't useful to show the complicated forms of figures and animals. |
| ☐ | ☐ | 9. You can use a ruler, but not a compass to draw cylinders. |
| ☐ | ☐ | 10. If you look down a row of fence posts, the ones in the distance will look smaller. |

Multiple Choice Questions

- _____ 11. The human head most closely resembles which basic shape?
- a. Cylinder
 - b. Cube
 - c. Sphere
 - d. Cone
- _____ 12. If you place a large box on the table in front of you and stand (or bend) so that you can just see over the top of the box, you will be able to see all four corners of the top. The two corners closer to you will look:
- a. farther apart than the corners at the far end of the box.
 - b. closer together than the corners at the far end of the box.
 - c. about the same distance apart as the corners at the far end of the box.
- _____ 13. When talking about three dimensions in your drawing, we mean that your drawings should have:
- a. color, shape and form.
 - b. height, width and depth.
 - c. pencil, ink and charcoal mediums.
 - d. cubes, cylinders and squares.
- _____ 14. Cast shadows should always be:
- a. on the same side as the light source.
 - b. on the opposite side from the light source.
 - c. left out of realistic drawings.
- _____ 15. The study of "foreshortening" is called:
- a. form
 - b. modeling
 - c. perspective
 - d. formatology

Student No. _____ Date _____

Name _____

Street No. _____

City _____ State _____